I. PNEUMOLOGY

One correct answer:

1. Which statement about irreversible chronic obstructive dysfunction in COPD is FALSE: (2)
   A. It may occur also in sarcoidosis
   B. It is pathognomonic for COPD
   C. It may occur also in cystic fibrosis
   D. It may occur also in obliterative bronchiolitis (post-viral or after lung transplantation)
   E. It occurs also in other irreversible chronic obstructive diseases

2. Which statement about physical signs of COPD severity is TRUE: (10)
   A. Flapping tremor is a sign of hypercapnia encephalopathy
   B. Respiratory rate under 25/min
   C. Heart rate under 110/min
   D. Paradoxical depression of abdomen in breathing
   E. Consciousness maintained

3. Hoover sign is characterized by: (10)
   A. Diffuse lung hypersonority and hemidiaphragm excursions reduction
   B. Diffuse lung hypersonority with normal hemidiaphragm excursions
   C. Breathing-in, upper part of thorax moves forward and low
   D. Breathing-in, upper part of thorax moves forward and up, with the increase of transverse diameter
   E. Breathing-in, upper part of thorax moves forward and up, with a decrease of transverse diameter

4. In COPD, the differential diagnosis is made with the following chronic diseases inducing coughing, spitting, EXCEPT: (11)
   A. Asthma
   B. Mucoviscidosis
   C. Bronchiectasis
   D. Post-tuberculosis syndrome
   E. Pneumothorax

5. In GOLD classification of COPD, group C is characterized by: (14)
   A. Increased risk, significant symptoms, stage III or IV obstruction after FEV and/or ≥2 exacerbations per year: CAT≥ 10 or 0 or 1 MMRC
   B. Low risk, reduced symptoms, stage III or IV obstruction after FEV and / or ≥2 exacerbations per year: CAT <10 or 0 or 1 MMRC
   C. Increased risk, reduced symptoms, stage II or III obstruction after FEV and <2 exacerbations per year: CAT <10 or 0 or 1 MMRC
D. Increased risk, reduced symptoms, stage III or IV obstruction after FEV and / or ≥2 exacerbations per year: CAT> 10 or 0 or 1 MMRCR
E. Increased risk, reduced symptoms, stage III or IV obstruction after FEV and/or ≥2 exacerbations per year: CAT <10 or 0 or 1 MMRCR

6. **Which of the following statements on the use of in COPD is TRUE:** (17)
   A. It works by blocking the muscarinic receptors of the sympathetic cholinergic nerve endings of the bronchi
   B. It should be administered at fixed intervals at 6 or 8 hours
   C. It is a short-acting anticholinergic inhaler
   D. It is administered once daily and it has insignificant side effects
   E. It is indicated as associative therapy, secondary intention

7. **IN COPD treatment group B, first therapeutic option is:** (19)
   A. Short-acting anticholinergics
   B. Inhaled corticosteroids in combination with long-acting betamimetics
   C. Long-acting anticholinergics or long-acting betamimetics
   D. Theophylline

8. **Community-acquired pneumonia is characterized by the following, EXCEPT:** (25)
   A. Occur in a patient hospitalized for another pathology at 72 h after admission
   B. Appear in the first 48 hours after hospitalization
   C. Are acquired outside the hospital
   D. Occur in people who have not been hospitalized 14 days before the onset of pneumonia
   E. Probable etiology of community-acquired pneumonia is related to the age of patient

9. **Which of the following statements regarding the morphology of germs at microscopic examination of sputum is NOT true:** (28,29)
   A. Klebsiella appears as a gram negative bacilli
   B. Small and pleomorphic gram-negative cocobacilli suggest *Haemophilus influenzae*
   C. Gram-positive diplococci encapsulated in lancet are suggestive of *Streptococcus pneumoniae*
   D. Gram-positive cocci heaps suggests *Staphylococcus aureus*
   E. Mixed flora usually consists of gram-negative cocci and gram-positive bacilli

10. **Which of the following asthma phenotypes is NOT described in the 2015 GINA Guidelines:** (38,43)
    A. Asthma associated with obesity
    B. Asthma with fixed airflow
    C. Non-allergic asthma
    D. Uncontrolled Asthma
    E. Allergic asthma A. Asthma associated with obesity

11. **Which of the following asthma phenotypes is NOT described in the 2015 GINA Guidelines:** (38,43)
    A. FEV or PEF 60-80%, PEF variability> 30%
    B. FEV or PEF ≥80%, PEF variability <20%
    C. FEV or PEF <60%, PEF variability of> 30%
D. FEV or PEF ≥80%, PEF variability 20-30%
E. FEV or PEF <60%, PEF variability <20%

12. Which of the following is NOT a malignant epithelial tumor (51)
   A. Adenocarcinoma
   B. Adenoma
   C. Large cell carcinoma
   D. Adenosquamous carcinoma
   E. Squamous carcinoma

13. Which of the following statements is TRUE about adenocarcinoma (50)
   A. It is difficult to distinguish from other adenocarcinomas of the lung metastases
   B. It is usually centrally located
   C. It occurs more frequently in men
   D. It is accompanied by extrathoracic slow dissemination
   E. It belongs to small cell carcinoma

14. Which of the following is NOT characteristic of lung cancer (53)
   A. Dyspnea worsens
   B. Often occurs coughing resistant to treatmentIs
   C. Chest radiograph within normal limits excludes lung cancer
   D. Repeated respiratory infections in the same territory
   E. Change the quantity/quality of expectoration

15. In lung cancer, metastatic diffusion is manifested by the following, EXCEPT: (53)
   A. Cutaneous extension with subcutaneous nodules
   B. The presence of cortical signs of irritation with seizures in brain metastases
   C. Bone lesions are usually of the osteosclerosis type
   D. Liver metastases with the presence of nodular hepatomegaly
   E. The presence of intracranial hypertension in brain metastases

16. Which of the following statements about the use of guided percutaneous biopsy in suspected lung cancer is TRUE: (54)
   A. It is useful in central lung tumors
   B. It is useful in tumors of minimum 1 cm
   C. It is useful for tumors located at 15 cm from skin
   D. It may be guided by plethysmography
   E. It is useful in peripheral lung tumors

17. Performing PET-CT using as a radioactive tracer 18 F-deoxyglucose has the following features in lung cancer, EXCEPT: (56)
A. Examined lesions must be larger than 8 mm  
B. It may allow the assessment of the metabolic activity  
C. It is especially useful for evaluating lung nodules  
D. It may confirm the neoplastic feature of the investigated lesions  
E. Confirms the extension in case of mediastinal lymph nodes  

18. **Which of the following chemotherapy is indicated in the treatment of small cell carcinoma** (63)  
A. Paclitaxel in combination with vincristine  
B. Pemetrexed in combination in cisplatin  
C. Gemcitabine  
D. Etoposide in combination with cisplatin  
E. The combination of vinorelbine, doxorubicin and cyclophosphamide  

19. **Which of the following cytostatics is a highly emetogenic drug** (63)  
A. Docetaxel  
B. Paclitaxel  
C. Topotecan  
D. Vinorelbine  
E. Cisplatin  

20. **Which of the following statements with regard to mycobacteria is false** (74)  
A. They are bacilli Gram +  
B. They are aerobic bacteria  
C. They are bacteria mobile  
D. The have a slow reproduction at 24 hours  
E. The are non-sporulated  

21. **The most important means of preventing spread of pulmonary tuberculosis is by debacillization of source and transmission interruption in infected patients:**  
A. Washing hands with soap and water  
B. Using antiseptic substances  
C. Effective ventilation of rooms  
D. Anti-TB Chemotherapy  
E. Correct sanitation of rooms  

22. **Which of the following anti-tuberculosis drugs is bacteriostatic agent:** (84)  
A. Pyrazinamide  
B. Isoniazid  
C. Rifampicin  
D. Streptomycin  
E. Ethambutol  

23. **Which statement on anti-TB treatment in patients with associated hepatic diseases associated is true:** (84)  
A. Isoniazid, rifampicin and pyrazinamide have no hepatotoxic effects  
B. The treatment is interrupted if an asymptomatic patient with TB and liver diseases, TGO, TGP are ≥3 times the normal values  
C. Treatment includes isoniazid, rifampicin, ethambutol and streptomycin  
D. The treatment is extended for only 7 months in patients with liver diseases  
E. The treatment includes isoniazid, rifampicin and pyrazinamide
24. **Which of the following statements about the risk of thrombembolism in pregnancy is TRUE**? (89)
   A. There is an increased risk in the first 24 weeks after delivery
   B. The greatest risk is in second quarter
   C. The greatest risk is in the first quarter
   D. The risk of pulmonary embolism is 60 times higher in the first six months compared to women who are not pregnant
   E. There is an increased risk in the first 6 weeks after delivery

25. **Which of the following is a moderate risk factor (OR: 2-9) for venous thromboembolism**? (89)
   A. Fractures of the lower limbs
   B. Knee and hip prostheses
   C. Myocardial infarction (in the past 3 months)
   D. Oral contraceptives
   E. Major Trauma

26. **In pulmonary thromboembolism, in radiographic assessment, the following may occur, EXCEPT**? (93)
   A. Tricuspid regurgitation
   B. Abrupt discontinuation of pulmonary vasculature by distal hypoperfusion
   C. Opacity in the periphery with rounded tip and basal pleura
   D. Cardiomegaly
   E. Pleural effusion

27. **Which of the following statements regarding the administration of unfractionated heparin in pulmonary thromboembolism is TRUE**? (99)
   A. It can be used in patients with creatinine clearance <30mL / min
   B. In case of overdose, the antidote is fresh frozen plasma
   C. Dose adjustment based on the aPTT is not required
   D. It is not administered to obese patients
   E. It has a low risk of bleeding side effects

   **Multiple answers:**

28. **In COPD, emphysema is characterized by the following**? (1)
   A. Normal alveolar septum
   B. Abnormal and persistent increase of aerial territories distal to terminal bronchioles
   C. Abnormal and temporary increase of aerial territories distal to terminal bronchioles
   D. No obvious fibrosis
   E. Destroyed alveolar septum

29. **Which of the following do NOT represent morphopathological changes of large airways**? (5)
   A. Replacing monolayer ciliated epithelium with metaplasia malpighian multi-layered epithelium
   B. Bronchial wall thinning
   C. Submucosal gland hyperplasia and hypertrophy
   D. Moderate Hypertrophy of bronchial smooth muscle
30. Which of the following statements regarding respiratory function are TRUE (3)
   A. It is constant throughout life
   B. It is estimated using FEV
   C. The annual decrease of FEV is of 15-30 ml/year
   D. Risk factors cannot act on respiratory function before birth
   E. Normal annual FEV decrease is greater than 40 ml/year

31. The following statements concerning body plethysmography are NOT true: (13)
   A. It is also called helium dilution method
   B. The evaluation is aimed at diffusion of carbon monoxide
   C. It can measure residual volume (RV)
   D. It is used as a pneumochart
   E. It can measure the overall lung capacity (OLC)

32. Chronic obstruction in patients with COPD generates the following: (21)
   A. Early closure of the bronchi during inspiration
   B. Distal hyperinflation
   C. Increased inspiratory pressure generated by muscularity
   D. Decreased respiratory muscle labor in COPD exacerbations
   E. Early closing of bronchi during expiration

33. Secondary prevention of COPD includes the following measures: (15:16)
   A. Correct antibiotic therapy administered during exacerbations
   B. Smoking withdrawal
   C. Antipneumococcal vaccinations
   D. Occupational exposure avoidance
   E. Annual influenza vaccination

34. The following statements about the use of roflumilast in COPD are true: (18)
   A. It is always associated with a short-acting bronchodilator
   B. It is always associated with long-acting bronchodilator
   C. Inhibits intracellular cAMP degradation
   D. It is taken once daily
   E. It belongs to the class 4 of phosphodiesterase inhibitors

35. In group A BPOC, primary treatment includes: (19)
   A. Long-acting anticholinergics
   B. Long-acting betamimetics
   C. Short-acting betamimetics
   D. Short acting anticholinergics
   E. Inhaled corticosteroids and long-acting betamimetics

36. Group B BPOC is not characterized by: (14)
A. Low risk, reduced symptoms, stage I or II of obstruction after FEV and/or 0-1 exacerbations per year, CAT <10 or 0 or 1 MMRC
B. Increased risk, significant symptoms, stage I or II of obstruction after FEV and/or 2 or more exacerbations per year, CAT <10 or 0 or 1 MMRC
C. Low risk, significant symptoms, stage I or II of obstruction after FEV and/or 0-1 exacerbations per year, CAT ≥10 or ≥2 MMRC
D. Low risk, significant symptoms, stage I or II of obstruction after FEV and/or 0-1 exacerbations per year, or MMRC 0 or 1 CAT≥10
E. Low risk, significant symptoms, stage I or II of obstruction after FEV and/or 0-1 exacerbations per year, CAT <10 or MMRC≥2

37. Regarding the use of long-acting betamimetics (LABM) in COPD, the following statements are true: (17)
   A. LABM is administered only when needed
   B. Salbutamol and formoterol are administered in one daily dose at fixed times
   C. Indacaterol is administered in one daily dose having a higher bronchodilating effect
   D. The effect of formoterol onsets quickly (3-5 min), it can be administered instead of short-acting betamimetics
   E. Ipratropium is recommended to be administered as a single dose

38. Which of the following bacteria are frequently involved in COPD exacerbations: (21)
   A. Haemophilus influenzae
   B. Pseudomonas
   C. Branhamella
   D. Adenovirus
   E. Chlamydia

39. Which of the following statements about oxygen therapy and non-invasive ventilation in COPD are FALSE: (19)
   A. Indication for oxygen therapy is fixed in the stable period, when under proper treatment PaO₂ is higher than 55 mmHg
   B. Oxygen therapy is indicated in cases of Pa O₂ between 56-60 mmHg if the patient also is associated with polycythemia or chronic pulmonary heart
   C. The route of administration is nasal cannula at a rate of 2-3 liters / minute
   D. Duration of use of oxygen therapy must be at least 10 hours
   E. Morning headache is a sign of a significant hypocarbia

40. The following statements regarding pulmonary hemodynamics investigations in a patient with COPD are TRUE: (13)
   A. They are mandatory for all patients suffering from COPD
   B. They are indicated if chronic pulmonary heart is suspected
   C. They are indicated if pulmonary hypertension is suspected
   D. Echocardiography is a routine procedure in these patients
   E. Thoracic interventions of bubbles of emphysema resection surgery type require prior hemodynamic pulmonary investigations

41. Lung emphysema secondary to genetic deficit of alpha 1-antitrypsin is characterized by: (4)
A. It is of centrilobular type and occurs in individuals over 40 years
B. It occurs in individuals with heterozygous or homozygous alleles associated with the synthesis deficiency of alpha-1-antitrypsin
C. The specific decrease of FEV will be of 15-30 ml/year
D. The FEV decrease in a smoker can reach 150ml/year
E. Emphysema is due to the action of proteolytic enzymes in the absence of antiproteases

42. **The following statements about small airways lesions in COPD, are NOT true:** (5)
A. They are the location of the most characteristic lesions of COPD
B. The lesions indicate a rapidly progressive bronchiolitis
C. The changes are the replacement of the multi-layered ciliated epithelium with metaplasia malpighian monolayer epithelium
D. The epithelial changes are associated with goblet cell hyperplasia
E. Activated lymphocytes of type CD 8 are not part of specific inflammatory infiltrate specific to small air routes

43. **In COPD, the extracellular matrix may be affected by:** (6.7)
A. Reducing the activity of proteolytic enzymes
B. Decrease in the amount of collagen fibers and excessive production of elastin fibers
C. Decrease in the amount of elastin fibers and excessive production of collagen fibres
D. The imbalance between proteases and antiproteases
E. Imbalance between oxidants and antioxidants produced in the bronchial wall

44. **In case of a patient with COPD, non-smoking, 25-year-old, mainly the following investigations will be made** (15)
A. Exploratory Thoracoscopy
B. Sweat test
C. PET-CT
D. Computerized Tomography
E. Dosing alpha-1-antitrypsin

45. **The use of inhaled corticosteroid therapy (CSI) in COPD is characterized by the following, EXCEPT:** (18)
A. Corticotherapy has superior effects in the treatment of COPD compared to asthma management
B. Long-term corticotherapy has the ability to significantly influence the annual degradation rate of FEV
C. It is administered during stable period in combination with bronchodilating therapy
D. It does not change the exacerbation rates
E. It is recommended in patients with significant obstruction (FEV <50% in stages 3 and 4) with more than two exacerbations per year

46. **In COPD exacerbation, laboratory indications of sending a patient in intensive care service are:** (22)
A. Ph<7,30
B. \( \text{PaCO}_2 < 60\text{mmHG} \)
C. \( \text{PaO}_2 < 50\text{mmHg} \)
D. \( \text{PaCO}_2 \text{} > 70 \text{mmHg} \)
E. \( \text{PaO}_2 \text{} > 55 \text{mmHG} \)

47. **The non-invasive ventilation in a patient diagnosed with COPD in exacerbation is contraindicated in the following cases:** (23)
   A. Respiratory acidosis (\( \text{pH} < 7.35 \) și \( \text{PaCO}_2 \text{} > 45 \text{mmHg} \))
   B. Severe ventricular arrhythmias
   C. The use of accessory respiratory muscle accompanied by paradoxical movement of the abdomen
   D. Trauma / deformation / facial burns
   E. Multiorgan failure
   F. Folosirea mușchilor respiratori accesori însoțită de mișcarea paradoxală a abdomenului
   G. Traume/deformări/arsuri faciale
   H. Multiple organ failure

48. **Statements about the the administration of corticosteroids through general channel in mild and severe exacerbations in COPD are TRUE, EXCEPT:** (23)
   A. They are indicated as routine in severe or mild forms exacerbations
   B. Relieves hypocarbia
   C. Decreases the risk of recurrence of exacerbations in next 2 years
   D. The usual dose is administered twice a day for a period of 21 days
   E. Duration of required treatment is over 21 days.

49. **In severe forms of COPD exacerbation, antibiotic therapy is recommended:** (23)
   A. In patients with good general status, with with unproductive cough, afebrile
   B. New-generation macrolide with extended spectrum on Haemophilus, Branhamella and pneumococcus will be first administered
   C. Amoxicillin / clavulanate for a period of 7-10 days will be administered
   D. In general, mild exacerbations do not require antibiotic therapy
   E. For patients with severe exacerbations, a broad-spectrum antibiotic therapy including Gram-negative bacteria, such as Pseudomonas should be considered

50. **Which of the following statements about the use of theophylline in the treatment of COPD are TRUE:** (17)
   A. It is indicated in patients with persistent nocturnal symptoms
   B. It causes side effects, such as arrhythmias and extremity tremors
   C. It requires short-term treatment
   D. It causes side effects, such as sinus bradycardia
   E. It is indicated in patients with sleep apnea syndrome

51. **Frank pneumonia francă is characterized by the following:** (27)
   A. Progressive evolution preceded by signs of nasopharyngeal infection
   B. Unsystemized heterogeneous opacity of interstitial type
   C. Pulmonary condensation syndrome 2-3 days after onset
   D. Brutal onset manifested by shivering and hyperthermia
   E. Etiology usually involves intracellular bacteria: *Coxiella burnetii*
52. **Which of the following signs and symptoms are NOT specific to atypical pneumonia:** (29)
   A. Pleuritic pain
   B. Digestive disorders
   C. Pulmonary condensation syndrome
   D. Arthralgia
   E. Progressive onset

53. **On physical examination of the respiratory system in community acquired pneumonia, we may meet** (30):
   A. A fluid syndrome (sometimes)
   B. Matite with the reduction of vocal vibrations
   C. Pulmonary condensation syndrome
   D. Bradypnea
   E. Crackles

54. **In elderly patients, pneumonia is characterized by the following EXCEPT:** (30)
   A. Clinical picture dominated by respiratory symptoms
   B. Disorders of consciousness up to coma
   C. Fever is always present
   D. Anorexia with weight loss
   E. Worsening of existing diseases

55. **Treatment of community-acquired pneumonia with M. Pneumoniae and C. Pneumoniae in patients under 25 de ani, will be made by choice with:** (32)
   A. Moxifloxacin
   B. Clarithromycin
   C. Amoxicillin
   D. Azithromycin
   E. Second generation cephalosporins

56. **In suspicion of Pseudomonas aeruginosa in a patient with associated risk factors, the choice of treatment in intensive case will be:** (34)
   A. fluoroquinolones + imipenem
   B. Amoxicillin + ertapenem
   C. Macrolides + imipenem
   D. Gentamicin
   E. Ciprofloxacin + β-lactamase of Pseudomonas aeruginosa

57. **Risk factors for community-acquired pneumonia for delayed radiological resolution are:**
   A. Young age
   B. COPD
   C. Etiology with *Legionella pneumophilla*
   D. Multilobular effect
   E. Altered immune status
58. The duration of antibiotic therapy is 7-10 days for infections (32,33)
   A. *M. pneumoniae*
   B. *S. pneumoniae*
   C. *H. influenzae*
   D. *Chlamydia pneumoniae*
   E. *Legionella*

59. Cough-variant asthma is characterized by the following, EXCEPT: (41)
   A. It is a specific form of asthma
   B. It manifests almost exclusively by productive cough
   C. It is a wrenching cough
   D. Dyspnea is the dominant symptom, rarely absent
   E. Predominantly diurnal occurrence

60. On physical examination of a patient with suspected asthma, the following can be identified (41)
   A. Prolonged inspiration accompanied by crackles
   B. Thorax hyperinflation with increased anterior-posterior and lateral diameter
   C. Prolonged inspiration accompanied by sibilant rales
   D. Normal respiratory frequency
   E. Rales and sibilant rales in the presence of prolonged expiration

61. Immediate allergic reaction related to asthma will be characterized by the following, EXCEPT: (39)
   A. Occurs within minutes of exposure to the allergen
   B. It will inhibit the secretion of histamine thromboxanes
   C. A vasodilatation appears with plasma extravasation in bronchial microcirculation
   D. It appears after 3-4 hours after allergen challenge
   E. Preformed mediators and those formed on spot will induce bronchial smooth muscle contraction

62. In asthma, reversible obstructive syndrome is characterized by: (42)
   A. Increased FEV and Tiffeneau index under 70%
   B. Increased FEV and Tiffeneau index over 80%
   C. Reversibility of obstruction is demonstrated by increasing FEV> 12% after administration of Salbutamol
   D. Forced vital capacity can be decreased due to lung hyperinflation and decreased residual volume
   E. Increased FEV and Tiffeneau index under 70%

63. The use of short-term β2-agonists in the treatment of bronchial asthma is characterized by: (44)
   A. The bronchodilation lasts ≥12 hours
   B. The action installs quickly in 5-15 minutes
   C. Dose sufficient to control bronchospasm is estimated at 1 spray twice/day
   D. Overdose may have effects on heart rate and blood pressure
64. **Which of the following statements regarding the use of anticholinergics in asthma are true:** (44)
   A. Associates side effects of urinary frequency and diarrhea type
   B. They have weaker and late bronchodilator effect than short-term β2-agonists
   C. Tiotropium is along-term anticholinergic with a 12 hours effect
   D. They are indicated in patients with coexistent heart disease in which β2-mimetics are contraindicated
   E. Combination with β2-mimetics has an additive effect

65. **In asthma, corticosteroids (CS) inhalers:** (45)
   A. They are always indicated in patients in 1st stage of therapy
   B. They reduce the need for oral corticosteroids
   C. They are never associated with long-lasting bronchodilators because they reduce each others pharmacological action
   D. They decrease the number of exacerbations
   E. The local secondary effect of Oropharyngeal candidiasis can be avoided by gargling with plain water after each inhalation of CS

66. **In 4th stage asthma, the control primary medication is, EXCEPT:** (46)
   A. Medium-dose inhaled corticosteroids and long-acting β2-agonists
   B. Low dose inhaled corticosteroids and long-acting β2-agonists
   C. Only low-dose inhaled corticosteroids
   D. Only oral corticosteroids
   E. Only high-dose inhaled corticosteroids and short-acting β2-agonists

67. **Which of the following statements related to loco-regional extension of lung cancer are NOT TRUE:** (53)
   A. Appears chest pain due to parietal pleura invasion
   B. Appears "Edem in cape" by compression of the inferior vena cava
   C. Plexalgia brachial may occur
   D. Claude Bernard Horner syndrome may occur, characterized by enophtalmia, lower eyelid ptosis and mydriasis
   E. Dysphagia through esophageal compression may occur

68. **Paraneoplastic syndromes most frequently encountered in lung cancer are:** (53,54)
   A. Migratory thrombophlebitis
   B. Pneumo hypertrophic osteoarthropathy
   C. Hypocalcemia by secretion of PTH-like proteins
   D. ACTH hyposecretion
   E. Neurologic syndromes of Lambert Eaton type syndromes
69. **In lung cancer, stages IIIA and IIIB, radiation therapy should be administered as follows:**
   (62)
   A. It can be used as the only treatment, with satisfactory results
   B. The administration can be sequential or simultaneous
   C. It is used in combination with chemotherapy and possibly after complete surgical resection, if possible
   D. Sequential administration is more efficient and is better
   E. In non-microcellular cancers, it may reduce the local recurrence rate as a method complementary to surgery

70. **Chemotherapy in lung cancer is characterized by the following, EXCEPT**
   (63)
   A. It has a major therapeutic effect in both microcellular and non-microcellular cancer
   B. It is indicated in debilitated patients (PS 3)
   C. Advanced age is a contraindication
   D. Current standards require the addition of a platinum compound together with another cytostatic
   E. Association of more than two drugs brings survival benefits

71. **Which of the following statements regarding the correct diagnosis in lung cancer are FALSE:**
   (54)
   A. Endobronchial or transbronchial biopsy is mandatory in all patients
   B. Exploratory thoracotomy is mandatory in all patients
   C. Bronchial endoscopy is mandatory in all patients
   D. Guided percutaneous biopsy is useful in central lung tumors
   E. Liver biopsy can be useful in cases of liver metastases

72. **Small cell carcinoma is characterized by the following:**
   (51, 59)
   A. Are localizare strict periferică
   B. Se însoțește de o diseminare precoce hematogenă
   C. Are o evoluție lentă
   D. Se asociază frecvent cu sindrome paraneoplazice
   E. Tratamentul chirurgical nu este indicat datorită creșterii rapide și metastazării precoce

73. **In the treatment of lung cancer, chemotherapy side effects are manifested by the following EXCEPT**
   (64)
   A. Neurotoxicity
   B. Hirsutism may be prevented by increasing the temperature of the scalp during chemotherapy infusion
   C. Granulocytosis with significant values 21 days after starting chemotherapy
   D. Cardiotoxicity
   E. Anemia

74. **Which of the following statements regarding the treatment of hemoptysis in lung cancer are TRUE:**
   (68)
   A. Percutaneous embolization of bronchial arteries may be necessary
   B. Hemostats have significant efficacy
   C. In massive hemoptysis, terlipressin can be administered up to percutaneous embolization
   D. Myocardial ischemia is not a contraindication to administration of terlipressin
   E. Peripheral arterial disease is a contraindication to administration of an analog of vasopressin A.
75. The following statements regarding the use of curative radiotherapy in lung cancer are TRUE: (61)
   A. The combination with chemotherapy increases efficiency
   B. It is used especially to control pain secondary to bone metastases
   C. It can be used as additional therapy after surgery
   D. It is used in the treatment of single metastases appeared after a single cure
   E. In stages I and II with nodule invasion, radiotherapy alone can eradicate tumor

76. In TNM classification of lung cancers, T2 is characterized by the following: (57)
   A. Tumor with a diameter of less than 3 cm
   B. It can be accompanied by visceral pleura invasion
   C. It can be accompanied by invasion of primitive bronchus, the tumor is at a distance of less than 2 cm to tracheal bifurcation
   D. At T2b stage, tumor diameter will be between 5 and 7 cm
   E. It may be accompanied by lobar bronchus invasion

77. The antiangiogenic treatment in lung cancer is characterized by: (65)
   A. It is indicated in advanced forms of lung cancer in combination with chemotherapy
   B. In advanced forms, doses of chemotherapy are necessarily changed
   C. It is indicated in squamous carcinoma
   D. Hemoptysis and uncontrolled hypertension are contraindications
   E. It is indicated in central forms

78. The administration of inhibitors of tyrosine kinases in lung cancer (64, 65)
   A. They are indicated in advanced forms that present an activating mutation of the EGF receptor
   B. Genetic anomalies on which these medicines work on are more common in Caucasian men
   C. Treatment is exclusively for adenocarcinoma tumors
   D. Acts by inhibition of tyrosine kinases
   E. There is no need for precise identification of genetic abnormalities before treatment

79. Which of the following statements regarding the treatment of unresectable stage III A non-microcellular lung cancer are TRUE: (66)
   A. The current standard consists of chemotherapy and radiotherapy administered sequentially
   B. Initial Chemotherapy can reduce tumor volume, which allows a curative surgery
   C. Sequential combination is more efficient, but at the cost of greater toxicity
   D. Radiochemotherapy is used in preoperative treatment of Pancoast tumors
   E. Thoracic radiation therapy will be administered at a dose of 60-65 Gy in association with chemotherapy

80. In stage IV non-microcellular lung cancer, therapy includes the following, EXCEPT (66)
   A. The number of cycles of chemotherapy will be 4-6
   B. Combinations of cisplatin and third generation cytostatics prolong survival
   C. In patients with impaired performance, monotherapy with vinorelbine will be used
   D. For patients with performance status > 2, the chemotherapy dose will be increased
   E. Palliative radiotherapy is recommended for specific metastatic locations
81. **Which of the following statements regarding the assessment of lung cancer by magnetic resonance imaging are FALSE:** (56)
   A. The number of false positive results is high enough
   B. Its spatial resolution is very high
   C. It is indicated in patients suspected of epidural or spinal metastases metastases
   D. specifies limits of invasion in apex tumors
   E. allows the assessment of metabolic activity in lung nodules

82. **Mesenchymal tumors of the lung are the following,** EXCEPT: (51)
   A. Pulmonary artery sarcoma
   B. Papillomas
   C. Pulmonary vein sarcoma
   D. Adenomas
   E. Synovial sarcoma

83. **Current standards in chemotherapy of lung cancer are characterized by** (63)
   A. The simultaneous association of more than two drugs does not bring survival benefits
   B. Monotherapy is reserved for debilitated patients
   C. In the event of progression therapy, chemotherapy doses should be increased
   D. Available cytostatics for microcellular cancers are: etoposide and topotecan
   E. Cytostatics associated with cisplatin in non-microcellular cancer are etoposide and topotecan

84. **Regarding patients with recurrent pleural effusion secondary to lung cancer,** the following are TRUE: (68)
   A. Response to chemotherapy can be expected before proposing a pleural sympysis
   B. Implantation of a catheter intrapleurally involves minimal infectious risks
   C. The talc is less effective than bleomycin or tetracycline
   D. At relapses due to pleurodesis, a catheter can be implanted intrapleurally
   E. The use of bleomycin and tetracycline has been abandoned

85. **In case of microcellular lung cancer, the following are true:** (67)
   A. Microcellular cancers rarely relapse
   B. A refractory tumor is a tumor unresponsive to first-line chemotherapy
   C. A tumor sensitive to treatment is a tumor with relapse at an interval of less than 3 months from the end of first line therapy
   D. In refractory patients, treatment options are limited
   E. In patients with tumors resistant to first-line chemotherapy, an association may be suggested between cyclophosphamide, doxorubicin and vincristine

86. **In TNM classification of lung cancers, impaired node N2 does NOT include:** (58)
   A. Metastases in the mediastinal and contralateral hilar lymph nodes
   B. Metastases in peribronchial ipsilateral and/or hilar lymph nodes
   C. Metastases in ipsilateral mediastinal lymph nodes
   D. Metastases in supraclavicular lymph nodes
   E. Metastases in subcarinal lymph nodes
87. **In diagnosis of tuberculosis, radiological examination reveals:** (79)
   A. Large hillides, vaguely shaped, infiltrative changes in butterfly wings and redistribution of blood flow in upper areas
   B. Nodular, infiltrative unorganized opacities
   C. Cavities in various stages of evolution
   D. Symmetrical, homogenous lesions
   E. Polymorphic lesions located predominantly in the apical regions

88. **Bacteriological examination for TB mycobacteria does NOT include:** (77)
   A. Seeding on quick liquid medium - Bactec
   B. Associated antibioticogram
   C. Microscopy in Lowenstein Jensen staining
   D. Molecular biological methods of PCR type
   E. Seeding over solid Ziehl-Neelsen medium

89. **Internal, field risk factors for tuberculosis include:** (74)
   A. Hematologic malignancy
   B. Poor hygiene
   C. Chronic treatment with corticosteroids
   D. Drinking coffee
   E. Collagenoses

90. **Pneumothorax (PTX) occurred in one patient with tuberculosis is characterized by:** (80)
   A. Stabbing chest
   B. Radiologically: emphasizing lung drawing
   C. Dyspnea
   D. Pulmonary hypersonority with vesicular murmur
   E. Dry cough

91. **Which of the following are criteria of certainty in the diagnosis of pleurisy serofibrinosa TB:** (81)
   A. The histopathology of pleural specimen shows specific TB granulomas
   B. Age <40 years
   C. Personal history of pulmonary TB
   D. Koch bacillus positive in microscopic exam of sputum
   E. Favorable evolution under anti-tuberculosis treatment

92. **Which of the following statements about osteoarticular tuberculosis are TRUE:** (82)
   A. Appears in the large overburdened joints
   B. The pain is diffuse and does not succumb to rest
   C. Pain is predominantly nocturnal
   D. Pain is exacerbated by pressure and motion
   E. It only affects small joints
93. In urogenital tuberculosis, ultrasound and urography reveal the following, EXCEPT: (82)

A. Kidney increased in size with irregular outline
B. The possible presence of calcifications and pyelocaliceal lesions
C. In advanced stages, ureter has fibrosis and is shortened
D. Pelvi-ureteric junction with dilatation and hydronephrosis
E. In advanced stages, "small mastic kidney" can be observed

94. Principles of antibiotic tuberculosis are correct (83)

A. The treatment is standardized: at least 5 anti-TB antibiotics for new cases and 6 in relapses
B. The attack phase consists of 5/7 days anti-TB antibiotics for 3 months
C. Treatment is free for all patients diagnosed with TB
D. The treatment is administered in a single dose before bedtime
E. In the continuation phase, anti-TB antibiotics will be administered 3/7 days in combination 2-3 drugs

95. Anti TB treatment is administered in individualized form in the following cases: (85)

A. The failure of initial treatment
B. Cases of multi-drug resistant tuberculosis
C. Relapses in cases in which chemoresistance has not been confirmed
D. Atypical mycobacteriosis
E. Severe adverse reactions to first line medication

96. Peritoneal tuberculosis is NOT characterized by the following: (83)

A. Ascites form accompanied by the excavated abdomen
B. Fibroblast adhesive form involves frequent occlusive complications
C. It may appear as ascites with bloating accompanied by dullness with superior concavity
D. It may appear as adhesive fibroblasts and ascites
E. In peritoneal fluid obtained by paracentesis BK, it is always absent

97. Which of the following statements regarding the damage of the central nervous system are TRUE: (81)

A. It is produced by marrow releases in choroid plexus
B. The onset is brutal
C. Clinically appears intracranial hypertension
D. Biochemistry exam of CSF reveals increased pH
E. Reaction to "tryptophan" is intensely positive

98. Regarding primary tuberculosis, the following are TRUE: (76)

A. It has an insidious onset with absent or manifested local symptoms
B. Healing never occurs spontaneously, the evolution is chronic in flare-ups and remissions
C. The differential diagnosis can be done with intestinal parasites malnutrition
D. Appears on a previously sensitized by primary infection
E. It can be associated with polymorph erythema
99. **For patients diagnosed with multidrug resistant tuberculosis, anti-TB treatment consists of association of anti-TB antibiotics under schemes:** (85)
   A. An attack phase of 6 months with the combination of 4 drugs and a further phase with the combination of 3 drugs administered orally
   B. An attack phase of 8 months with the combination of 4 drugs to which germs are sensitive and a further phase with a combination of drugs administered orally
   C. An attack phase attack 8 months with the combination of at least 3 drugs that were administered previously and a further phase with the combination of 4 drugs
   D. The treatment duration is 12 months
   E. The duration of treatment is 18 months after culture conversion

   A.

100. **Which of the following statements regarding pulmonary thromboembolism are TRUE:** (88)
    A. The central type that affects the pulmonary artery trunk
    B. It is chronic when the embolus is centrally located in the vascular lumen
    C. It can be acute when the embolus is centrally located in the vascular lumen
    D. It is peripheral if it affects lobar arteries
    E. Pulmonary thromboembolism is massive when the patient is hemodynamically unstable

101. **Wells criteria for determining the clinical probability of pulmonary embolism are the following, EXCEPT:** (96)
    A. Heart rate <90/min
    B. Clinical signs of deep vein thrombosis
    C. Age <50 years
    D. Hemoptysis
    E. Active Malignancy

102. **In pulmonary thromboembolism, the following clinical signs do NOT appear frequently:** (91)
    A. Hypertension
    B. Tachypnea, cyanosis, tachycardia
    C. Signs of deep venous thromboembolism in the lower limbs
    D. Pneumothorax
    E. Increased P2 component of noise

103. **Echocardiographic changes in pulmonary thromboembolism include:** (95)
    A. Right ventricular dilatation
    B. Contractility depression of right ventricular free wall compared to the apex
    C. Disturbance right ventricular ejection - "McConnell" sign positive
    D. Increasing velocity of mitral regurgitation jet
    E. Atrophy of the right ventricular free wall

104. **Which of the following are weak risk factors (OR <2) predisposing to pulmonary thromboembolism (89)**
    A. Blood transfusions
B. Immobilization due to position (long travel)
C. Hydrostatic varicose
D. Inflammatory colon disease
E. Laparoscopic cholecystectomy

105. Which of the following criteria are part of "PERC rule-out criteria" in pulmonary thromboembolism: (96)
   A. Age > 60 years
   B. Heart Rate > 100 / min
   C. Oxygen saturation < 90%
   D. Pervious myocardial infarction
   E. The absence of hemoptysis

106. The use of D-dimer in pulmonary thromboembolism is characterized by (92):
   A. They are sensitive, but nonspecific
   B. D-dimer value over 1000 ng/ml makes pulmonary embolism unlikely
   C. They are elevated in cancers and pregnancy
   D. Determination of D-dimers is especially needed when the clinical probability of pulmonary embolism is high
   E. They have elevated values in cases of trauma or surgery

107. Surgical embolectomy in pulmonary thromboembolism is characterized by: (101)
   A. It is indicated in thromboembolism with low, intermediate and high risk
   B. It is indicated in high-risk thromboembolism
   C. It is indicated in some cases of pulmonary embolism with intermediate risk
   D. A unilateral incision in pulmonary artery will be made
   E. Clots are removed down to the segmental branches

108. Which of the following statements about venous filters in pulmonary thromboembolism are TRUE: (101)
   A. They are indicated in patients with acute pulmonary embolism and have absolute contraindications of anticoagulation
   B. The filter is generally placed in the adrenal portion of inferior vena cava
   C. Placing the filter in the inferior vena cava increases the risk of pericardial tamponade
   D. They are indicated in patients with confirmed recurrent pulmonary embolism
   E. In case of thrombus in renal veins, filters will be placed suprarenal location

II. CARDIOLOGY

One correct answer:

1. Regarding stable angina pectoris, which of the statements is NOT TRUE: (105)
   A. It is the most common expression of atherosclerotic damage of coronary artery
   B. Among non-atherosclerotic causes are muscle bridges, post-radiation damage and luetic coronaritis
   C. It is more common in women aged between 55 and 65
   D. Ischemia can occur in the absence of coronary organ damage
2. **With respect to other forms of ischemic heart disease, the following statement is not TRUE:** (116-117) U  
   A. Angina variant is also called coronary syndrome X  
   B. Silent ischemia is the documentation of ischemia without angina  
   C. Microvascular Angina is the presence of typical symptoms of angina, accompanied by objective modifications of ischemia, but angiographically with normal coronary arteries  
   D. Prinzmetal angina treatment is based on calcium blockers  
   E. Chronic ischemic mitral insufficiency is better tolerated clinically than acute ischemic mitral regurgitation

3. **Referring to variant angina, the following statement is TRUE:** (114) U  
   A. ECG stress test is the most important diagnostic test  
   B. Coronary angiography is recommended in all patients  
   C. Artery spasm occurs frequently in normal coronary arteries  
   D. Challenge tests are commonly used in practice  
   E. It is characterized by angina-like symptoms, occurring in the first half of the night

4. **Regarding STEMI, the following statement is not TRUE:** (118-119) U  
   A. It is most commonly the result of a coronary occlusion by thrombosis or embolism  
   B. It is frequently a complication of atherosclerotic lesions  
   C. The non-atherosclerotic causes that may accompany coronary occlusion are: vasculitis, extended coronary spasm and paradoxical embolism  
   D. Pathologically, it has 4 phases  
   E. STEMI with normal coronary arteries can occur in spontaneous lysis of an intracoronary embolus

5. **Which of the following statements related to Killip classification of acute myocardial infarction is NOT correct:** (121) M  
   A. Class II: acute pulmonary edema with congestive crackles in the lung fields more than 50%  
   B. Class I: No lung stasis crackles  
   C. Class II: pulmonary congestion in less than 50% of the lung fields  
   D. Class II: jugular turgid, noise 3 present  
   E. Class IV: cardiogenic shock

6. **Which of the following is ECG suggestive manifestation of STEMI:** (122) M  
   A. ST elevation> 0.1 mV in V2-V3  
   B. ST elevation> 0.15 mV in V2-V3 in men> 40 years  
   C. ≥0,1 mV ST elevation in DI and aVL is suggestive of STEMI lateral  
   D. ST elevation> 0.1 mV in V3R and V4R is suggestive of STEMI inferior left ventricular wall  
   E. ST elevation> 0.1mV in V7-V9 is suggestive of STEMI right ventricular free wall

7. **Specific clinical forms of non-ST ACS, do NOT include:** (137) U  
   A. Angina de novo  
   B. Angina crescendo  
   C. Angina descrescendo
D. Post revascularization angina
E. Early post-infarction angina

8. Regarding the long-term therapeutic measures in non-ST ACS, which statement is NOT true: (147)
   A. Aspirin is indicated for 12 months
   B. Beta blockers are administered to patients with impaired left ventricular function
   C. Eplerenone is indicated in patients with LVEF <35%, diabetes or heart failure
   D. Sartanii are used when ACE inhibitors are not tolerated
   E. Statins are recommended to maintain LDL-cholesterol <70 mg / dL

9. Regarding the indication to perform coronary angiography in non-STEMI ACS, which of the following statements is TRUE: (146)
   A. Real emergency coronary angiography is recommended in patients at high risk
   B. Early coronary angiography is recommended in patients with intermediate risk
   C. Coronary angiography in 72 hours is recommended in patients at high risk
   D. Coronary angiography in 72 hours is recommended in patients with intermediate risk
   E. Early Coronary angiography is recommended in patients at high risk

10. Regarding the anticoagulant therapy in non-STEMI ACS, which of the following statements is NOT TRUE: (145)
    A. Unfractionated Heparin is an indirect thrombin inhibitor
    B. Fondaparinux has no risk of thrombocytopenia
    C. Enoxaparin is an indirect factor Xa inhibitor
    D. Unfractionated heparin requires maintaining an aPTT between 250-350 seconds
    E. Bivalirudin is a direct inhibitor of thrombin

11. Which of the following statements is NOT true about the treatment of hypertension in pregnancy: (168)
    A. Methyldopa the medication of choice
    B. The use of pure beta blockers (no associated alpha action) is recommended
    C. In case of gestational hypertension, European guidelines recommend target values BP of 140/90
    D. If hypertension preceds pregnancy and there is no organ damage, US guidelines recommend that a BP of 160/110 mmHg is maintained
    E. In preeclampsia, US guidelines recommend that a systolic BP between 140-155 mmHg is maintained

12. Which of the following statements is a subclinical organ damage in HTA: (159)
    A. ankle-brachial index > 0.9
    B. Carotid wall thickness < 0.9 mm
    C. Proteinuria > 300 mg / 24 hours
    D. Pulse wave velocity > 12 m / s
    E. The decline of creatinine clearance < 100 ml / min

13. Which of the following statements is TRUE regarding the treatment of hypertension: (167)
    A. In patients with chronic kidney disease, it is recommended to maintain BP below 140/90 mmHg
    B. In diabetic patients, beta-blockers are elective
    C. The association between IEC and Sartana is recommended
D. The combination of aliskiren and ARBs is beneficial
E. In elderly patients, it is recommended to maintain BP below 130/80 mmHg

14. **Which of the following statements about treatment with beta-blockers is NOT true:** (166) U
A. Sotalol has intrinsic sympathomimetic activity
B. Pindolol has intrinsic sympathomimetic activity
C. Nebivolol has vasodilatory action through the release of nitric oxide
D. Atenolol, Metoprolol and Bisoprolol are selective beta blockers
E. Carvedilol is a beta-blocker with alpha effect

15. **Routine lab tests in HTA, do NOT include:** (156) U
A. Fundus
B. LDL cholesterol, HDL cholesterol and total cholesterol
C. Potassium levels without tourniquet
D. Estimation of creatinine clearance using the Cockcroft-Gault formula
E. Analysis of urine

16. **Which of the following is a recommended scan in HTA:** (157) U
A. NMR
B. CT
C. The values of serum renin
D. Carotid Eco Doppler
E. Serum creatinine

17. **Regarding the NYHA classification, the following is TRUE:** (174) M
A. NYHA Class II includes patients with severe limitation of physical activity
B. NYHA Class IV includes patients with severe limitation of physical activity (dressing, toileting Daily)
C. NYHA Class I includes patients with mild limitation of normal physical activity
D. NYHA Class II includes patients with limited physical activity, like gardening, dancing and sweeping
E. NYHA Class III includes patients with symptoms at rest

18. **Counter-regulatory vasodilator molecules, do NOT include:** (175) U
A. Adrenomedulin
B. Apelina
C. Endothelins
D. NO
E. Natriuretic peptides

19. **Which of the following statements regarding the explorations in ICC, is not TRUE:** (178) M
A. Transesophageal ultrasound is performed in patients with congenital heart disease and complex valvulopathies
B. Endomyocardial biopsy is performed to establish myocardial infiltrative diseases
C. A maximal effort test, no symptoms, in a patient with no therapy, it does not invalidate the diagnosis of systolic heart failure
D. Chest radiograph identifies the presence of cardiomegaly and pulmonary venous congestion
E. Coronary angiography is indicated in patients with risk factors for coronary artery disease and left ventricular systolic dysfunction
20. **Regarding treatment in cardiogenic shock, the following statement is not true:** (193) M
   A. Levosimendan is a phosphodiesterase inhibitor which prevents the degradation of cAMP
   B. Epinephrine is given as a slow infusion in resistant forms or in bolus at the onset of resuscitation
   C. Dopamine increases myocardial contractility and cardiac output by stimulating β-adrenergic receptors
   D. Primary coronary angioplasty is a choice in cardiogenic shock caused by myocardial infarction
   E. Mechanical devices have a superior effect than intra-aortic counterpulsation balloon

21. **Regarding the treatment of acute cardiogenic pulmonary edema, the following statement is NOT true:** (191) M
   A. Digital cardiogenic pulmonary edema is administered to achieve rate control in patients with atrial fibrillation
   B. High doses of morphine can cause respiratory depression especially in the elderly
   C. Vasodilators are recommended in patients with valvular stenosis
   D. The combination of thiazide diuretics is especially recommended for coronary pulmonary edema
   E. Spironolactone is recommended for coronary pulmonary edema

22. **Which of the following statements is NOT a precipitating factor for acute heart failure:** (187) U
   A. Hypothyroidism
   B. Anemia
   C. Pneumonia
   D. Valvular stenosis
   E. Acute Coronary Syndromes

23. **Regarding the treatment of dilated cardiomyopathy, the following statement is NOT true:** (199) M
   A. Calcium channel blockers are an initial therapy for any patient with symptomatic idiopathic DCM
   B. Diuretics can be administered moderately to control fluid retention
   C. Amiodarone in low doses for long term is effective in reducing ventricular arrhythmias
   D. Idiopathic dilated cardiomyopathy remains the main indication for cardiac transplant
   E. Resynchronization therapy may be considered in patients with LBBB, heart failure NYHA class III refractory to maximal treatment and LVEF <35%

24. **Regarding physical examination in obstructive hypertrophic cardiomyopathy, the following statement is NOT true:** (201) M
   A. A systolic ejection murmur occurs in the presence of intraventricular gradients
   B. Appears a left parasternal diastolic murmur
   C. Palpable left atrial pulse occurs in the absence of intraventricular gradients
   D. Extensive Jugular venous pulse appears in the absence of intraventricular gradients
   E. Apical systolic or mezocardial murmur occur in the absence of intraventricular gradients

25. **Regarding the classification of restrictive cardiomyopathy, the following statement is NOT true:** (204) M
   A. Löffler endocarditis is a primary form of CMR
B. Infiltrative diseases are secondary forms of CMR
C. Hypereosinophilic syndrome belongs to obliterative causes of CMR
D. Fabry disease is a tezaurismoze
E. Myocardial metastases are obliterative forms of CMR

A. Endocardita Loffler este o formă primară de CMR

26. **Regarding the ECG manifestations of hypertrophic cardiomyopathy, the following statement is TRUE** (201) G
   A. Right ventricular hypertrophy occurs frequently
   B. The emergence of sustained VT on Holter monitoring increases the risk of sudden death
   C. Q-waves in can occur earlier leads(V1-V6)
   D. There may appear concave supravelevation of ST –T segment
   E. Frequently appears BRS

27. **Dilated cardiomyopathy definition, does NOT include:** (195) U
   A. DTDVS over 2.7cm / m²
   B. Left ventricular EF less than 45% determined by echocardiography
   C. Left ventricular EF below 45% determined radionuclearly
   D. Shortening fraction of left ventricle below 25%
   E. Shortening fraction of left ventricle below 25%

28. **Which of the following statements regarding the classification of arrhythmias is not TRUE** (208) M
   A. Atrioventricular dissociation is a supraventricular arrhythmia
   B. Sinoatrial block is a sinus arrhythmia
   C. Atrioventricular block is a conduction disturbance
   D. Atrial fibrillation is a supraventricular arrhythmia
   E. Wandering pacemaker is a sinus arrhythmia

29. **Regarding paroxysmal supraventricular tachycardias, the following statement is NOT true R:** (210) M
   A. It occurs most frequently on heart after post-infarction sequelae
   B. It shows with the onset episodes of palpitations and sudden end
   C. Termination of tachycardia is made by carotid massage under ECG control
   D. Sporadic bouts of supraventricular tachycardia are not proliferated if there are no symptoms
   E. Curative treatment is the radiofrequency ablation of the slow pathway

30. **Regarding the pacemaker, the following statement is NOT true:** (222) U
   A. Position IV indicates the presence of multisite pacing
   B. Position I corresponds stimulated room
   C. Position II corresponds to the detection chamber where the stimulus
   D. Position III corresponds to the type of response to the detection of a stimulus
   E. Position IV indicates the presence of modulation frequency

31. **The following statement is not the structural cause of cardiac arrest:** (229) M
   A. Hypertrophic obstructive cardiomyopathy
   B. WPW syndrome
   C. Arrhythmogenic dysplasia of right ventricle
D. Syncope syndrome
E. Coronary artery disease

32. **Regarding the clinical manifestations in mitral regurgitation, the following statement is not TRUE:** (237) G
A. Angina occurs in mitral chronic regurgitation
B. liyotimic or syncope states can occur
C. Peripheral embolism is rare compared to mitral stenosis
D. In acute mitral insufficiency, a picture of acute pulmonary edema emerges
E. Palpitations may occur

33. **Regarding the aortic insufficiency hearing, the following statement is NOT true:** (242) G
A. Frequently noise 3 is present in severe aortic insufficiency
B. A diastolic murmur is present that increases in slouching forward
C. Mitradiastolic rumble may occur
D. Noise 1 is diminished
E. Frequently, noise 4 is present in severe aortic insufficiency

34. **Regarding the clinical examination in mitral regurgitation, the following statement is NOT true:** (237) M
A. A holosystolic apical murmur with armpit iradiation is present on hearing
B. Noise 1 is diminished
C. Noise 2 is duplicated
D. A diastolic rumble may be heard in severe failure
E. Snap opening of the mitral may occur

35. **Surgical treatment of aortic stenosis is indicated in the following situations:** (241) M
A. Symptomatic severe aortic stenosis
B. In moderate symptomatic aortic stenosis
C. In asymptomatic and aortic stenosis with valve area less than 2 cm²
D. Close and asymptomatic aortic stenosis with normal left ventricular function
E. Asymptomatic close aortic stenosis that does not become symptomatic during stress test

36. **Regarding mitral stenosis, the following statement is NOT true:** (236) M
A. Critical stenosis is under 1cm²
B. Surgery is indicated in patients with mitral valve area under 1.5cm² and with contraindications of valvuloplasty
C. The main complication is the atrial fibrillation
D. The treatment of choice is percutaneous balloon valvuloplasty
E. Surgery is most often in closed or open heart commissurotomy

37. **Contraindications of percutaneous valvuloplasty with balloon in mitral stenosis do NOT include:** (236) M
A. Orifice of over 1.5 cm²
B. The presence of intraatrial thrombus
C. Severe mitral valve calcification
D. Moderate mitral regurgitation
E. Orifice area below 1.5 cm² A.
38. **Which of the following microorganisms most commonly are part of the etiology of infective endocarditis with positive blood cultures:** (247) U
   A. Gram-negative of HACEK group
   B. Brucella
   C. Bartonella
   D. Oral streptococci
   E. Fungi

39. **Which of the following is NOT a common complication of acute pericarditis** (252) U
   A. Recurrence
   B. Chronicity
   C. Progression to chronic adhesive pericarditis
   D. Pericardial tamponade
   E. Progression to constrictive pericarditis

**Multiple correct answers:**

40. **Typical Irradiation of stable angina pain does NOT inclue:** (106) U
   A. Irradiation in the mandible
   B. Left laterothoracic irradiation
   C. Dorsal Irradiation
   D. Irradiation in bracelet
   E. Interscapulovertebral left irradiation

41. **Atypical features for stable angina pectoris are:** (106) M
   A. Chest pain with oppression or heaviness
   B. Sharp pain with movement or breathing
   C. Persistent pain that does not stop after 5 to 10 min after administration of nitroglycerin
   D. Pain that radiates in shoulders
   E. Pain of several seconds

42. **The differential diagnosis of stable angina includes:** (108) M
   A. Cardiac disorders: pericarditis, endocarditis, Tietze syndrome
   B. Digestive disorders: Crohn's disease, acute pancreatitis
   C. Pleural-pulmonary disorders: embolism, pleuritis, pleurisy
   D. Musculoskeletal disorders: costochondritis, cervical plexus compression of the cervical rib
   E. Psychiatric disorders: hyperventilation, depression, somatiforme disorders

43. **Canadian functional classification doe NOT include:** (107) G
   A. CC I: patients can exercise over 5 METS but over 7 METS angina occurs
   B. CC III: inability to perform activities of care
   C. CC IV: patients can not perform effortlessly over 2 METS
   D. CC II: marked limitation of ordinary physical activity
   E. CC I: ordinary slight limitation of physical activity

44. **Regarding paraclinical tests in angina, the following statements are TRUE:** (107) G
A. Scintigraphy rest is recommended in patients with normal resting ECG and ECG test of inconclusive effort
B. Computed tomography allows the calculation of cardiac calcium score correlated with coronary ATS load
C. ECG test is performed in patients with normal ECG at rest and moderate probability of coronary artery disease
D. The presence of pathological Q waves in several leads, BAV III, BRS and the resting ECG for ventricular arrhythmias are adverse prognostic factors
E. Coronary angiography as a first evaluation method is recommended high-risk patients

45. Regarding microvascular angina, the following statements are NOT true: (112) G
A. It is also called coronary syndrome X
B. It has an inconsistent relationship with ECG changes and a slow response to nitroglycerin
C. Long-term nitrates is standard therapy
D. Determination of coronary flow by invasive methods are standard diagnostic
E. Assays for induction of myocardial ischaemia is contraindicated

46. Regarding Prinzmetal angina, the following are TRUE: (115) G
A. It is produced by large epicardial artery spasm
B. Impairment of the right coronary artery produces most often ventricular tachycardia
C. Previous nnterventricular artery impairment produces most frequently blocks
D. The main complications are myocardial infarction, arrhythmias and ventricular arrhythmias
E. Beta-blockers in monotherapy are contraindicated

47. Regarding Prinzmetal angina, the following statements are TRUE: (114-115) G
A. Revascularization by Coronary angioplasty is recommended in cases of vasospasm refractory to treatment with mild to moderate atherosclerotic lesions
B. Myocardial revascularization surgery offers benefits to <50% of patients
C. Nitrates uneffectively treat episodes of angina
D. Angina usually occurs in the second part of the night and takes less than 30 minutes
E. In tests of challenge, intracoronary administration of ergonovine is preferred

48. Regarding silent ischemia, the following statements are TRUE: (112-113) G
A. The presence of nocturnal ischemic episodes indicate a bi or tricoronarian impairment
B. Coronary angiography is indicated in patients at high risk
C. Beta-blockers are most effective in reducing the duration of episodes of ischemia
D. Holter ECG monitoring provides important diagnostic information and helps to stratify risk
E. Has as a sublayer the arterial spasm

49. Absolute contraindications to fibrinolytic treatment in STEMI are: (127) U
A. Transient ischemic attacks in the last six months
B. Ischemic stroke documented that in the last six months
C. Severe hepatic dysfunction
D. Active peptic ulcer
E. Non-compressible punctures areas in the last 24 hours

50. The following are NOT the absolute contraindications to fibrinolytic treatment in STEMI (127) U
A. Gastrointestinal bleeding last month
B. Menstruation
C. Aortic dissection
D. Oral anticoagulant treatment
E. Prolonged cardiac resuscitation

51. Relative contraindications to fibrinolytic therapy are NOT the following: (127) U
A. History of intracranial hemorrhage
B. Active peptic ulcer
C. Pregnancy
D. Arteriovenous malformations of the central nervous system
E. Major injury in last 3 weeks

52. Regarding STEMI treatment, the following statements are TRUE: (128-129) G
A. Fibrinolytic therapy is considered when primary angioplasty can not be performed within 2 hours of first medical contact
B. Surgical revascularization may be a solution in patients with STEMI and mechanical complications
C. Reperfusion can be made mechanically or pharmacologically
D. Patients with STEMI undergoing primary angioplasty should receive compulsory combination of aspirin and abciximab
E. Patients with STEMI undergoing primary angioplasty should be treated with fondaparinux

53. Treatment associated to reperfusion in STEMI therapy includes: (128-129) G
A. Combination of aspirin and ticagrelor in patients with STEMI which have received primary angioplasty
B. The combination of clopidogrel and aspirin in patients with STEMI, which received fibrinolysis
C. Routine administration of glycoprotein IIa / IIIb inhibitors is beneficial
D. Anticoagulant treatment associated with primary angioplasty includes: UFH, enoxaparin and bivalirudin
E. Administration of glycoprotein IIa / IIIb inhibitors is recommended in solid intracoronary thrombus

54. Regarding fibrinolytic therapy in STEMI, the following statements are TRUE: (128) G
A. It is the treatment of choice
B. Fibrin-specific fibrinolytic agents are streptokinase and urokinase
C. Persistent absence of angina and ST-segment elevation resolution are indicators of failed fibrinolysis
D. Resolution ST-T 60-90 minutes and reperfusion arrhythmias are typical of successful fibrinolysis markers
E. Coronary angiography is indicated in all patients after fibrinolysis within 3-24 hours

55. Regarding markers of myocardial necrosis, the following statements are TRUE: (123-124) M
A. Troponin I is normalized between 5-10 days
B. CK-MB peak concentrations (without reperfusion) within 24 hours
C. Troponins in blood 3-12 hours of presentation
D. Troponins only grow in myocardial infarction
E. Troponin measurement is performed at presentation, 3-6 hours and 12 hours after the initial determination
56. **Differential diagnosis of STEMI is NOT done by:** (125) U
   - A. Chronic pericarditis
   - B. Acute aortic dissection
   - C. Spontaneous pneumothorax
   - D. Acute pyelonephritis
   - E. Acute hepatitis

57. **Regarding clinical presentation in STEMI, the following statements are NOT true:** (120-121) G
   - A. The infarct of the anterior wall of the left ventricle is often associated with bradycardia, hypotension and gastrointestinal manifestations
   - B. The presence of mitral systolic murmur indicates mitral regurgitation or ventricular septal rupture
   - C. Blood pressure below 90mmHg without signs of hypoperfusion is characteristic of cardiogenic shock
   - D. In dysfunction of left ventricle noise 4 appears
   - E. Infarct of inferior wall presents signs of sympathetic activation: hypertension and tachycardia

58. **Differential diagnosis of ACS does NOT include:** (141) U
   - A. Endocarditis
   - B. Myocarditis
   - C. Pericarditis
   - D. Takayasu
   - E. Tako-tsubo cardiomyopathy

59. **Causes of increase in troponin are:** (140) U
   - A. Stroke or subarachnoid hemorrhage
   - B. Aortic dissection
   - C. Tako-Tsubo cardiomyopathy
   - D. Patients with sepsis critics
   - E. Pericarditis

60. **Braunwald classification of angina pectoris include:** (138) G
   - A. Type I: angina onset, severe
   - B. Type II: angina at rest occurred in the last month (without episodes in the last 48 hours)
   - C. Type II: painless onset angina at rest in the last months
   - D. Type III: rest and acute angina
   - E. Type III angina at rest that appeared in last month (without symptoms in the last 48 hours)

61. **Represent high risk in non-ST ASC, the following:** (142) M
   - A. The presence of ventricular gallop, new or worsening crackles
   - B. Hypertension, tachycardia or malignant ventricular arrhythmias
   - C. Age <70 years
   - D. BRS or emerging BRD
   - E. Pathological Q-waves or ST depression <1mm in more derivatives

62. **Regarding antiplatelet medication in non-ST ASC, the following statements are TRUE:** (144) M
A. Aspirin inhibits the COX 1 increases the production TX A2 and induces temporary platelet inhibition
B. Clopidogrel enters into action in 2-4 hours and lasts 3-10 days
C. Prasugrel enters into action in 30 minutes and lasts 5-7 days
D. Ticagrelor enters into action in 30 minutes and lasts 3-4 days
E. Abciximab blocks the final pathway of platelet aggregation

63. **Differential diagnosis of ACS does NOT include:** (141) U
   A. Acute pyelonephritis
   B. Cholecystitis.
   C. Sickle cell crisis
   D. Aortic aneurysm
   E. Intestinal obstruction

64. **Regarding non-STACS, ECG changes do NOT include:** (139) U
   A. ST depression
   B. Persistent ST elevation
   C. Transient ST elevation
   D. BRS transitional
   E. Transient appearance wave Q

65. **Regarding fondaparinux, the following statements are TRUE:** (145) M
   A. It is the anticoagulant of choice for conservative therapy in non-ST ACS
   B. It has increased risk of intrastent thrombosis risk (low anticoagulant effect in vitro)
   C. In patients undergoing PCI and pretreated with fondaparinux heparin bolus NF is recommended
   D. It is contraindicated at a creatinine clearance below 60 ml / min
   E. It requires monitoring of aPTT

66. **In patients with non-ST ACS, coronary angiography is recommended in the following situations:** (140) U
   A. All patients with non-ST ACS and high-risk
   B. Patients with recurrent angina and ST- T dynamic changes
   C. Patients with unclear differential diagnostic despite imaging examination
   D. Patients with stable angina at intermediate risk
   E. Patients with non-ST ACS and intermediate risk

67. **Which of the following are NOT causes of secondary HTA:** (153) U
   A. Age
   B. Chronic pyelonephritis
   C. Primary hyperaldosteronism
   D. Adrenal insufficiency
   E. Hyperparathyroidism

68. **Regarding high blood pressure, the following statements are TRUE:** (150) M
   A. It is the most common chronic disease in Europe
   B. It has a dual quality of disease and risk factor
   C. Diastolic value is more important than systolic
   D. Pulse pressure in the elderly is considered a significant prognostic factor
E. Essential form of hypertension has three forms: young adult systolic, diastolic and systolic of the elderly

69. **Regarding main HTA mechanisms, the following statements are TRUE:** (152) M
A. Renin causes lung conversion of angiotensinogen to angiotensin I
B. In hypertensive patients, blood pressure-natriuresis curve is shifted to the left
C. In kidney, Na-Ca exchange is inhibited
D. Vascular system contributes to the pathogenesis of hypertension progression in endothelial dysfunction
E. Catecholamines sensitize renal response to changes in fluid volume

70. **Isolated systolic HTA appears in the following diseases:** (154) U
A. Severe aortic stenosis
B. Paget
C. Hypothyroidism
D. thyrotoxicosis
E. Arterio-venous fistula

71. **Which of the following statements regarding the diuretic medication in the treatment of HTA are not TRUE:** (165) M
A. Hydrochlorothiazide is a carbonic anhydrase inhibitor
B. Furosemide is recommended for resistant hypertension
C. Diuretic medication at a reduced dose drug potentiates the effect of other classes
D. An increased dose of diuretic to reduce blood pressure by 20 mmHg may be the initial treatment
E. Hydrochlorothiazide is most commonly used in combination with Furosemide

72. **Regarding nonpharmacological therapy, the following are NOT true:** (163) M
A. Nicotine leads to the increase arterial rigidity, visceral obesity and insulin resistance
B. For weight reduction, DASH diet can be recommended
C. Salt consumption should be restricted necessarily to below 5 g / day
D. The consumption of 50 g ethanol per day for men and 30g / day for women may be recommended
E. Strenuous exercise and of isometric type is recommended

73. **Regarding interventional treatment in HTA, the following are TRUE:** (169) M
A. Includes renal denervation by ablation by catheter radiofrequency
B. It is indicated for renal artery stenosis
C. It is indicated in a glomerular filtration rate below 45 mL / min / 1.73m²
D. Not eligible patients with secondary hypertension
E. It is indicated in patients with a history of renal revascularization

74. **The following are not factors of cardiovascular risk:** (159) U
A. Blood glucose levels over 198 mg / dL after the glucose load test
B. Peripheral arterial disease
C. HDL cholesterol below 46mg / dl for women
D. Chronic kidney disease
E. Abdominal obesity

31
75. Regarding the stratification of risk in high blood pressure, the following statements are TRUE:
   (159) G
   A. HTA grade III associated with 1-2 FR has a very high added risk
   B. Normal high normal blood pressure associated with diabetes has a high added risk
   C. Grade II HTA associated with 1-2 FR has a moderate additional risk
   D. Grade I HTA associated with 1-2 FR has a moderate additional risk
   E. Grade II hypertension associated with diabetes has a very high added risk

76. Regarding the subclinical organ damage, the following statements are TRUE: (159) M
   A. The presence of right ventricular hypertrophy
   B. Ankle-brachial index below 0.9
   C. Carotid wall thickness over 0.9
   D. Microalbuminuria more than 300 mg / 24 hours
   E. Increase in serum creatinine between 1.2-1.4 mg / dL in women

77. Regarding TA values over which HTA is considered, are the following statements, EXCEPT: (158) G
   A. Averages / 24 hours ≥120-130 mmHg SBP and DBP ≥80 mmHg
   B. Averages night ≥130 mmHg systolic BP and diastolic BP ≥80 mmHg
   C. Values measured in the medical office ≥140 mmHg systolic BP
   D. Values measured by the patient at home ≥120 mmHg systolic
   E. Diurnal values ≥135 mmHg systolic

78. HTA classification after BP values include: (158) M
   A. Grade II hypertension: 140-169 mmHg systolic
   B. HTA high normal: 80-85 mmHg DBP
   C. Grade I: DBP 85-89 mmHg
   D. Hypertension grade I: 160-179 mmHg systolic
   E. TA normal: 120-129 mmHg systolic

79. Which of the following statements regarding the complications of hypertension are TRUE: (162) G
   A. Atrial fibrillation is the most common supraventricular arrhythmia
   B. Lacunar infarcts are based on atherosclerotic changes
   C. Brain infarcts given by large arteries are caused by lipohyalinoze lesions
   D. Hypertensive patients with mild renal impairment have an increased prevalence of organ damage
   E. Peripheral vascular disease is defined by the ankle-brachial index above 0.9

80. Clinical organ damage in HTA does NOT include: (160) U
   A. Blood glucose between 102-125 mg / dL
   B. Nephropathy with serum creatinine above 1.4 mg / dL in women
   C. Hypertensive Retinopathy
   D. Left ventricular hypertrophy.
   E. Heart failure

81. Stratification of risk in hypertensive patients does NOT include: (159) M
A. High normal BP associated with renal disease is a high additional risk
B. Grade I hypertension without risk factors is an ordinary risk
C. 1-2 grade II hypertension risk factors present a moderate additional risk
D. Grade III hypertension with risk factors presents a very high added risk
E. BP normal organ damage associated with an additional high-risk

82. **HTA diagnosis include:** (158) U
A. First, the determination of BP values and then stadialization
B. Assessment of target organ damage
C. Assessment of total cardiovascular risk and associated risk factors
D. Identification of possible causes of secondary hypertension
E. First assess target organ damage

83. **Which of the following statements about the hypertension medication are TRUE:** (166) G
A. Adrenergic receptor blockers are recommended first-line in patients with prostate adenoma
B. Methyldopa is the treatment of choice in pregnancy
C. Central adrenergic inhibitors are resorcinol and Guanethidine
D. Adrenergic inhibitors acting neuronally are clonidine and methyldopa
E. Hydralazine is a direct vasodilator

84. **Regarding HTA complications, the following statements are TRUE:** (161) G
A. In ischemic heart disease, DBP below 75mmHg is beneficial
B. Ventricular fibrillation is the most common of the ventricular arrhythmia in HTA and it occurs more frequently in patients with left ventricular hypertrophy
C. In cerebrovascular disease, the hypertension, cholesterol, atherosclerosis relationship is very important
D. In the case of heart failure, risk is related more to TAS than TAD
E. In diabetic patients, the more reduces BP, the more decreases the cardiovascular risk

85. **Regarding the extended assessment performed by a specialist in HTA, the following statements are TRUE:** (157) U
A. Search for secondary HTA: renal, aldosterone, cortisol, catecholamines urine and serum
B. Serum renin values after one hour of ingestion of Captopril if primary aldosteronism is suspected
C. The values of serum renin and aldosterone in case renal vascular hypertension is suspected
D. Renal and adrenal ultrasonography
E. Chest radiography if heart failure or aortic dissection is suspected

86. **Indicators of secondary hypertension are:** (155) U
A. A family history of kidney disease
B. Lisch nodules of the iris suggestive of neurofibromatosis
C. Conn adenoma indicates Neurofibromas
D. Episodes of sweating, headache, anxiety, suggest pheochromocytoma
E. History of urinary tract infection, haematuria, analgesic abuse suggest renal parenchymal disease

87. **Medication that may cause HTA, are the following, EXCEPT:** (155) U
A. carbenoxolone
B. AINS
C. Eplerenone
D. Opioids
E. Oral contraceptives

88. **Which of the following statements regarding Digoxin are TRUE:** (182) G
   A. It has positive inotropic effect by inhibiting the pump $Na / K$
   B. It is recommended in patients with EF below 35% and with persistent symptoms despite therapy with beta-blockers, ACE inhibitors or AR and antialdosterone
   C. It is recommended to achieve rate control in patients with IC and paroxysmal atrial fibrillation
   D. Has as adverse effects: atrial, ventricular tachycardia and atrial fibrillation
   E. Renal, pulmonary dysfunction and hypothyroidism increases the risk of overdose

89. **Which of the following statements regarding the treatment of chronic heart failure are NOT true:** (181)
   A. The adverse effects of ACE inhibitors are dry cough, renal dysfunction, hypotension and hyperkalemia
   B. Ivabradine is recommended in patients with heart failure in sinus rhythm who can not tolerate ACE inhibitors
   C. The combination of hydralazine- dinitrate- Isosorbide is indicated in patients with FE≤45% and dilated VS with persistent symptoms (NYHA II-IV) despite therapy with beta blockers, ACE inhibitors and antialdosterone
   D. Thiazide diuretics rapid effect and short
   E. Beta blockers that start in small doses which will be doubled after 4-8 weeks depending on heart rate, BP and symptoms of IC

90. **Vasoconstrictor substances produced in excess in ICC are:** (175) U
   A. adrenomedulin
   B. Apelina
   C. Neuropeptide Y
   D. Urotensina II
   E. Bradykinin

91. **Which of the following statements regarding possible etiologies of heart failure are NOT true:** (174) G
   A. Valvular stenosis have as volume overload mechanism
   B. In amyloidosis, cardiac filling decreases
   C. In amyloidosis, myocardial contractile efficiency decreases
   D. Intracardiac shunts have as a mechanism pressure overload
   E. Anthracyclines decrease the myocardial contractile efficiency

92. **Which of the following statements regarding ACC/AHA classification of heart failure are TRUE:** (174) G
   a. Stage A includes patients without symptoms but with structural heart disease strongly associated with risk of developing ICC
   b. Stage C includes patients with symptoms and signs of ICC
   c. Stage D includes patients with severe symptoms despite maximal therapy, but without structural heart disease
d. Stage B includes patients with left ventricular hypertrophy, myocardial infarction and asymptomatic valvulopathies
e. Stage A includes patients with diabetes, hypertension and chronic ischemic heart disease

93. Regarding natriuretic peptides, the following statements are TRUE: (177) M
A. In patients with acute worsening of symptoms, BNP value under 100pg / ml excludes ICC.
B. NT-proBNP Dispense only nt-probnp
C. In patients with symptoms of progressive onset, values of nt-probnp below 300pg / ml exclude ICC
D. In patients with symptoms of progressive onset, values of NT-proBNP below 125pg / ml exclude ICC
E. ICC in patients with acute onset symptoms is excluded from NT-proBNP values below 500pg / ml

94. Regarding signs and symptoms of chronic heart failure, the following statements are NOT true: (177) M
A. Dyspnea occurs secondary to a decrease in cardiac output
B. Effort fatigue is caused by increased pulmonary venocapilare pressure
C. Sibilan and ronflant crackles are common secondary to accumulation of fluid in the alveoli
D. Protosistolic gallop is specific to heart failure
E. Nocturia appears consecutive to decrease of renal vasoconstriction overnight

95. Regarding the implantation of cardiac defibrillator, the following statements are TRUE: (184) G
A. It is indicated for secondary prevention in patients with ventricular arrhythmias (ventricular tachycardia, ventricular fibrillation) who produced haemodynamic instability
B. It is indicated for secondary prevention in patients with ICC in NYHA class II-III, EF ≤45% despite optimal pharmacological therapy over 6 months
C. Implantation of a cardiac defibrillator produced a dramatic reduction in arrhythmic mortality in ICC
D. In primary prevention in patients with ventricular arrhythmias that did not produce hemodynamic instability
E. In primary prevention in patients with ICC in NYHA class II-III and FE≤35% despite optimal pharmacological therapy over three months

96. Regarding pharmacological treatment in chronic heart failure, the following are TRUE: (179) M
A. Low-salt diet, reducing salt intake to 3-4.5 g / day
B. A minimum consumption of liquid 2l per day in severe forms of heart failure is recommended
C. Pneumococcal polysaccharide vaccine is recommended
D. Avoid nondihidropiridinic calcium blockers
E. Dihydropyridine calcium blockers should be avoided

97. Regarding the pathophysiology of heart failure, the following statements are true, EXCEPT: (175) G
A. Activation of the sympathetic nervous system leads to maintaining perfusion in vital territories kidney, muscle, heart and brain
B. In ICC, occurs a desensitization and a decrease in receptor β
C. Angiotensin II causes vasoconstriction of efferent arteriole and vasodilation of efferent arteriole
D. The sympathetic nervous system causes the activation of apoptotic genes
E. Aldosterone increases the absorption of salt and water in the proximal convoluted tubule

98. **Among aggravating cardiac factors in ICC are:** (175) 
A. Pulmonary thromboembolism
B. Inotropic negative medication
C. Myocardial infarction
D. Hypertensive crisis
E. Infective endocarditis

99. **Regarding the adverse effects of medication used in ICC, the following statements are NOT true** (182-183) 
A. Main adverse effects of beta blockers are worsening heart failure, symptomatic hypotension and excessive bradycardia
B. Adverse effects of antialdosteronics are renal dysfunction, cough, hyperkalemia and gynecomastia (spironolactone)
C. Iivabradine induces tinted yellow sight
D. Digoxin frequently associates phosphenes, headache and confusion
E. Diuretics cause hyperuricemia, dyslipidemia and insulin resistance

100. **Regarding contraindications of medication used in ICC, the following statements are TRUE** (182) 
G
A. Ace inhibitors are contraindicated when there is a history of angioedema, serum creatinine ≥2.5mg / dl, hyperkalemia ≥5mmol / l and bilateral renal artery stenosis
B. Antialdosteronics are contraindicated in bilateral renal artery stenosis, hyperkalemia ≥5mmol / l and creatinine≥2.5 mg / dl
C. Beta-blockers are contraindicated in asthma and sinus node disease
D. Digoxin is contraindicated in pre-excitation syndrome
E. Digoxin is contraindicated in severe lung disease, renal dysfunction and hypothyroidism

101. **Regarding acute pulmonary cardiogenic edema, the following statements are NOT true** : (188) 
M
A. The hematosis process is affected
B. It is a syndrome that groups related signs and symptoms of peripheral hypoperfusion
C. Hearing reveals protosistolic galloping
D. Circulation currently reflects large negative pleural pressures
E. If evolution is favorable, symptoms are quickly felt

102. **Regarding the cardiogenic shock , the following statements are NOT true:** (189) 
M
A. A reduction of more than 10 mmHg of BP compared to basal conditions is one of the features of cardiogenic shock
B. The most common cause of cardiogenic shock is myocardial infarction
C. Cardiogenic shock occurs in a loss of more than 25% of the left ventricular myocardium
D. Associate anuria under 20ml / hour
E. Cardiac index is less than or equal to 1.8L / min / m²
103. Regarding mechanical devices used in the treatment of cardiogenic shock, the following statements are TRUE: (192) U
   A. Devices of ventricular assistance may be first choice in treatment of cardiogenic shock
   B. Tandemhart is an axial pump on left ventricular aortic valve
   C. Thoratec is a complex device of mechanical uni or biventricular extracorporeal support
   D. The maximum duration of use of Tandemhart is 14 days
   E. Intra-aortic balloon counterpulsation is used routinely in cardiogenic shock secondary to hypertensive crisis

104. Regarding the treatment of cardiogenic shock, the following statements are NOT true: (193) M
   A. Inhibition of platelet is mandatory made with clopidogrel
   B. Tonicardiac digitalis are useful only to reduce the rapid ventricular rate in patients with ventricular fibrillation
   C. Intracoronary pyruvate may be administered concomitantly with vasopressor catecholamines
   D. Dobutamine at doses below 3μg / lg / min stimulates diuresis
   E. Dopamine dose of 10-20μg / kg / min has vasoconstrictor effects

105. Drug therapy in cardiogenic shock includes: (193) U
   A. Nitroglycerin
   B. Sodium nitroprusside
   C. Morphine
   D. Milrinone
   E. Levosimendan

106. Treatment of acute cardiogenic pulmonary edema does NOT include: (191) U
   A. Electric cardioversion
   B. Tolvaptan
   C. Verapamil
   D. ACE iv
   E. Dobutamine

107. Biological evaluation in the ICA includes: (190) U
   A. Complete blood counts
   B. Urinary Sodium
   C. Urinary Potassium
   D. Glycaemia
   E. Proteinuria / 24 hours

108. Regarding the signs and symptoms in acute cardiogenic pulmonary edema, the following statements are TRUE: (188) U
   A. Dyspnea occurs more frequently in the morning upon waking up
   B. Cough and sputum is rusty
   C. They may be present intense bubbling noises that can be heard from a distance
   D. Intercostal and supraclavicular circulation may occur
   E. Strengthening pulmonary component of noise

109. In heart-lung radiography in ICA are NOT revealed: (189) U
   A. Large well defined hillsides
B. Redistribution of blood flow to the lung bases
C. Perivascular drawing particularly emphasized perihilarly
D. Buckling lung fields
E. Accentuated perivascular drawing in middle and upper fields

110. **Which of the following statements regarding hypertrophic cardiomyopathy treatment are NOT true:** (203) M
A. Vasodilators are the treatment of choice
B. Propranolol is the most used beta-blocker
C. Verapamil may be administered concomitantly with propranolol
D. Disopyramide is recommended due to absence of damage
E. Dual chamber pacing is recommended for relieving symptoms and obstruction of output tract instead of surgery

111. **Regarding etiologies of restrictive cardiomyopathy, the following statements are NOT true:** (204) U
A. Family idiopathic form is the most common cause of CMR
B. Serotonin causes fibrous endocarditis
C. *Pseudoxanthoma elasticum* causes endomyocardial impairment
D. Diabetic cardiomyopathy is the infiltrative cause affecting endomyocardium
E. Mediastinal irradiation is the infiltrative cause of impaired myocardium

112. **Regarding the echocardiographic findings in hypertrophic obstructive cardiomyopathy, the following statements are NOT true:** (202) M
A. Asymmetric hypertrophy commonly involving the side wall of VS
B. Report thickness SIV / thickness over 1.5 PLVS
C. SAM appears both in obstructive and unobtrusive form
D. It can associate a small cavity LV
E. In M mode, the decrease of mitral valve of EF slope can be observed

113. **Differential diagnosis of systolic murmur of hypertrophic obstructive cardiomyopathy is made by:** (202) U
A. Murmur of mitral stenosis
B. Ventricular septal defect
C. Tricuspid insufficiency
D. Aortic Insufficiency
E. Pulmonary insufficiency

114. **On echocardiographic examination in dilated cardiomyopathy is NOT highlighted:** (198) U
A. The collapse of the inferior vena cava absent in inspiration
B. Globular aspect of the right ventricle
C. Diastolic impairment of left ventricle
D. Systolic impairment of left ventricle
E. Highlighting possible mitral and tricuspid insufficiency

115. **The following statements regarding CMD etiopatogenesis are NOT true:** (196) U
A. Idiopathic family form a is the most common
B. CMD can occur secondary to bacterial myocarditis incompletely healed
C. Autoimmune damage by the presence of circulating antimyocard autoantibodies is the accepted cause of CMD
D. Recessive autosomal form of CMD is the most frequent
E. Pure dominant autosomal form of CMD is most frequent

116. **Which of the following are the causes of CMD:** (195-196) U
A. fungal Myocarditis
B. Ischemic Heart Disease
C. Collagen Diseases
D. Chronic use of acetaminophen
E. Nutritional deficiencies

117. **Regarding the autoimmune hypothesis in CMD etiopathogenesis, the following statements are TRUE:** (196) M
A. Anti-myosin heavy chain are present
B. Anti β1-adrenergic receptor are present
C. The nicotinic cholinergic receptor antibodies are present
D. Anti-actin antibodies are present
E. In myocardial biopsy samples, there was observed inappropriate expression of MHC class I molecules

118. **Regarding the atria flatter, the following statements are NOT true:** (212-213) G
A. Type I flutter is caused by a circuit microreintrace from the right atrium
B. Conversion to sinus rhythm is usually made with a first external electric shock 200 J
C. Under the influence of digoxin, atrial flutter turns into auricular arrhythmia, whose frequency is easier to control
D. Use of Class IC antiarrhythmic drugs should be preceded by treatment with beta-blockers or verapamil to prevent ventricular acceleration
E. Atrial electro stimulation by overdrive is made in repetitive forms and refractory to flutter

119. **Sinus node disease also presents the following manifestations:** (225) U
A. Atrioventricular block
B. Sinoatrial block
C. Supraventricular tachyarrhythmias
D. Sinus stop
E. Ventricular tachyarrhythmias

120. **Regarding the treatment of atrial fibrilation, the following statements are TRUE:** (215-216) G
A. Elective electric cardioversion is indicated for haemodynamic instability
B. Emergency electric cardioversion is indicated for patients with atrial fibrillation and pre-excitation syndrome
C. Drug conversion is made with iv propafenone
D. Maintenance sinus rhythm requires a permanent prevention with antiarrhythmics of class IC
E. Antiarrhythmic drugs can be used for lowering electrical defibrillation threshold
121. **With respect to antiarrhythmic medications, the following is TRUE:** (209) G
   A. Bretylium tosylate is a Na+ blocker
   B. Lidocaine decreases repolarization phase and has little effect on normal tissue phase 0
   C. Mexiletine decreases repolarization phase and has little effect on normal tissue phase 0
   D. Procainamide belongs to Class IC
   E. Beta-blockers belong to Class IV

122. **Supraventricular tachyarrhythmias is characterized by:** (209) U
   A. Compulsory atrial rate over 100 beats per minute
   B. Origin of the higher reentry circuit at Hiss bifurcation
   C. QRS complex is compulsory under 0.12 seconds
   D. QRS complex can be increased in the presence of a frequency-dependent functional aberration
   E. Compulsory atrial rate over 150 beats per minute

123. **With regard to the TP treatment of long QT syndrome the following is TRUE:** (221) M
   A. Suppression of torsades de pointes with magnesium sulfate is effective only when magnezemia is normal
   B. In chronic administration, propafenone has preventive beneficial effects in patients with long congenital QT QRS
   C. Ablation of the right superior cervical sympathetic ganglion is recommended
   D. It is recommended the use of betablockers
   E. It is recommended to use lidocaine, mexiletine and propanol

124. **With respect to atrial fibrillation the following is NOT true:** (214) U
   A. Cholinergic paroxysmal atrial fibrillation occurs more frequently in the second half of the night
   B. Sympatoadrenergic paroxysmal atrial fibrillation occurs more frequently in the second half of the night
   C. Precipitating factors of the cholinergic form of paroxysmal fibrillation are tea, coffee and alcohol
   D. Paroxysmal cholinergic fibrilation occurs more frequently in elderly patients with organic heart disease
   E. Paroxysmal cholinergic fibrilation is more common in young people without organic heart disease

125. **With respect to atrial fibrillation, the following are TRUE:** (214) U
   A. There are 3 types
   B. Paroxysmal fibrilation ends only by cardioversion
   C. Persistent fibrilation is the one that is not resolved despite attempts by electrical cardioversion or drugs
   D. Paroxysmal fibrilation lasts for at least 7 days
   E. Paroxysmal fibrilation lasts for at least 7 days

126. **Regarding paroxysmal supraventricular tachycardia the following are TRUE:** (210) M
   A. Atrial rate between 150-200 beats per minute
   B. P negative wave in DII, DIII, aVF
   C. Atrioventricular conduction is 2: 1
   D. QRS complex is always narrow
   E. Presents R / T phenomena
127. **With respect to antiarrhythmic drugs, the following are TRUE:** (209) U
   A. Class IB shortens repolarization
   B. Class IC has little effect on repolarization
   C. Sotalol is a beta-blocker and belongs to Class II
   D. Amlodipine and nifedipine are calcium blockers and belong to Class IV
   E. Amiodarone is Class III

128. **With regard to atrial flutter, the following are NOT true:** (212) M
   A. Type I spreads to the ventricles of 2/1 or 4/1
   B. In type II the reentrant circuit can be extended to the left atrium
   C. Sometimes there may be a propagation of 1:1, generating a frequency of 300 beats per minute
   D. Carotid sinus massage interrupts atrial flutter
   E. Carotid sinus massage produces abrupt decreased ventricular frequency and flutter wave frequency

129. **Signs and symptoms of atrial fibrillation include:** (215) U
   A. Adam-Stokes syncope
   B. Discomfort in the neck
   C. Palpitations
   D. Angina
   E. "Cannon" systoles

130. **Etiology of ventricular extrasystole includes:** (217) U
   A. Infarction
   B. Mitral valve prolapse
   C. Ischemic cardiopathy
   D. Arrhythmogenic dysplasia of right ventricle
   E. Dilated cardiomyopathy

131. **Regarding the etiology of chronic mitral deficiency the following are NOT true:** (237) M
   A. Inflammatory: rheumatic fever, systemic lupus erythematosus
   B. Functional: hypertrophic obstructive cardiomyopathy
   C. Congenital structural: unicuspid, tricuspid
   D. Chest trauma
   E. Prosthesis dehiscence

132. **With respect to the mitral auscultation, the following are NOT true:** (234) M
   A. Graham-Steel breath of functional lung failure occurs
   B. Functional tricuspid insufficiency regurgitation occurs
   C. Noise 1 decreases
   D. Noise 2 decreases
   E. Mitral opening snap decreases in severe mitral stenosis

133. **Statements on the clinical picture in aortic stenosis are TRUE:** (239) M
   A. Angina, dyspnea and lipotimia occur
   B. In advanced occurs paroxysmal nocturnal dyspnea occurs
C. On auscultation there is a rough diastolic murmur radiating on carotids
D. Noise 2 increases in intensit
E. Gallvardin phenomenon occurs

134. **Regarding the severity criteria in transthoracic echocardiography of mitral insufficiency the following are TRUE:** (238) U  
A. Regurgitant jet area at vena contract  
B. Regurgitant jet area in the left ventricular outflow tract  
C. Regurgitated volume  
D. Ejection fraction of regurgitated volume  
E. Ejection fraction of left ventricle

135. **With regard to mitral stenosis, the following are TRUE:** (234) M  
A. Rheumatic mitral stenosis may be associated with septal defect  
B. Congenital mitral stenosis is rare  
C. Cor triatriatum is a condition that occurs with mitral stenosis by mitral valve obstruction  
D. Diameter normal of mitral valve orifice is 2-4 cm²  
E. Left ventricle is commonly dilated, as a result of pressure overload

136. **With respect to the clinical picture in mitral stenosis, the following are TRUE:** (234) U  
A. The main symptom is exertional dyspnoea  
B. Dysphagia may occur  
C. Dysphonia may occur  
D. Hemoptysis may occur  
E. Angina may occur

137. **ECG manifestations of mitral stenosis include:** (236) U  
A. left bundle-branch block  
B. left atrial hypertrophy  
C. left ventricular hypertrophy  
D. Right ventricular hypertrophy  
E. right atrial hypertrophy

138. **Radiological manifestations in mitral stenosis include:** (236) U  
A. Doubling the right lower arch border  
B. Bulging the left middle arch  
C. Bulging the left lower arch  
D. Valvular calcification  
E. Venous stasis represented by Kerley A and B lines

139. **Regarding echocardiography in mitral stenosis the following are NOT true:** (235) U  
A. Commissural mergers and free edge thickening are specific changes in degenerative mitral stenosis  
B. The size of the left ventricle is determined  
C. The size of the left atrium is determined  
D. Pulmonary artery pressure may be directly determined  
E. Transesophageal ultrasound is required before surgery
140. **Regarding the transesophageal ultrasound in valvulopathies the following are NOT true:** (240) M
   A. In aortic valvulopathies, the valve and the subvalvular apparatus are better viewed
   B. It is used to detect intraatrial thrombi
   C. It is required before surgery
   D. It can identify vegetation specific to infective endocarditis
   E. It is inferior to transthoracic ultrasound when viewing the mitral valve apparatus

141. **The pre-operative coronary angiography is indicated in all valvular patients having at least one of the following criteria:** (235) U
   A. Women over 40
   B. Patients with a history of ischemic heart disease
   C. Patients with suspected ischemic heart disease
   D. Left ventricle with low ejection fraction
   E. Men over 40 years

142. **With regard to the treatment of aortic stenosis the following are NOT true:** (241) G
   A. Percutaneous balloon valvuloplasty is the choice
   B. TAVI is a solution to surgery
   C. Surgery is recommended in tight aortic stenosis
   D. Percutaneous balloon valvuloplasty is also called TAVI
   E. Surgery is indicated in moderate aortic stenosis patients to be subjected to ascending aorta surgery

143. **Which of the following pathologies are NOT encountered in dilated ascending aorta:** (242) U
   A. Fabry Disease
   B. Ehler Danlos Syndrome
   C. Osteogenesis imperfecta
   D. Wilson Disease
   E. Syphilitic aortitis

144. **With regard to pulmonary stenosis, the following are true:** (245) M
   A. The most common etiology is rheumatic
   B. On auscultation a ejection systolic murmur is found in parasternal intercostal space II-III
   C. Noise 2 is diminished
   D. At ECG right ventricular hypertrophy is noticed
   E. At lung x-ray poor pulmonary circulation and pulmonary artery dilatation are noticed

145. **With regard to pulmonary insufficiency, the following are TRUE:** (246) M
   A. Sometimes at auscultation a diastolic rumble is noticed
   B. Lung x-ray shows left ventricular dilatation
   C. Transesophageal ultrasound fixes diagnoses and indicates surgery
   D. Treatment is applied for the underlying disease
   E. Surgery is performed only in severe congenital pulmonary insufficiency

146. **Regarding the paraclinical explorations in infective endocarditis, the following are NOT true:** (248) M
A. Transesophageal ultrasound is the first choice because it provides more accurate information about vegetation versus transthoracic echocardiography
B. At least 2 blood cultures should be obtained every 12 hours, preferably during febrile access
C. Rheumatoid factor may be positive
D. MRI imaging and CT scans are used routinely for a better view of the valve apparatus
E. Laboratory testing can reveal normochromic, normocytic anemia

147. Regarding the modified Duke criteria of infective endocarditis the following are TRUE: (248) U
A. For a positive diagnosis 5 major criteria are required
B. For positive diagnosis 3 major criteria and a minor criteria are required
C. Janeway haemorrhages, Roth spots and Osler nodules are major criteria
D. A positive blood culture is a minor criterion
E. Highlighting an emerging valvular regurgitation seen by echocardiography is a major criterion

148. The following patients are considered at high risk for endocarditis: (249) M
A. Patients with congenital heart diseases completely corrected by implantation of prosthetic material
B. Infectious endocarditis in their history
C. Patients with congenital heart disease incompletely corrected by implantation of prosthetic material
D. Patients who are carrying out dental maneuvers involving handling dental gum or mouth piercing
E. Patients undergoing endoscopic examination of the urinary tract

149. Regarding the treatment of infectious endocarditis the following are NOT true: (249) M
A. For methicillin-sensitive staphylococcus the recommended treatment is with flucloxacillin and gentamicin
B. For penicillin-sensitive streptococcus, in patients allergic to penicillin are recommended macrolides
C. For methicillin-resistant staphylococcus vancomycin in monotherapy is recommended
D. For penicillin-sensitive streptococcus, ceftriaxone may be administered
E. For penicillin-sensitive streptococcus in patients allergic to penicillin, vancomycin is recommended in combination with gentamicin

150. Regarding the ECG stages of acute pericarditis, the following are NOT true: (251) M
A. Stage IV: returning to ECG aspect prior to the installation of pericarditis
B. Stage II: diffuse negativity of T-waves
C. Stage IV: ST returning to isoelectric line and T wave flattening
D. Stage II: upper concave ST segment elevation, PR segment deviation in opposite lead to polarity wave
E. Stage I: upper convex ST segment elevation, PR segment deviation in the same lead as the wave polarity

151. At echocardiography in acute pericarditis with pericardial tamponade it may highlight: (251) M
A. Diastolic collapse of the left atrium (sign of cardiac compression)
B. "Swinging heart" aspect
C. Distention of lower vena cava and disappearance of expiratory collapse
D. Diastolic collapse of right ventricle (heart compression sign)
E. Occurrence of thickened and fibrotic pericardium

152. **With regard to cardiac tamponade, the following is TRUE:** (251) U
A. It can occur with small amounts of liquid that accumulates slowly
B. It determines cardiac output reduction
C. It determines hypertension
D. It requires emergency pericardiocentesis for diagnostic purposes, as neoplastic etiology is common
E. Paradoxical pulse is present

153. **Regarding the treatment of acute pericarditis, following statements are NOT true:** (252) M
A. Colchicine can be given as monotherapy in the first episode
B. Colchicine associated with ibuprofen can be given in the first episode
C. Surgical drainage is the choice in cardiac tamponade or higher fluid releases in asymptomatic patients
D. Pericardectomy is recommended for patients with persistent fluid releases despite correctly undergone treatment
E. Colchicine is recommended in uremic pericarditis

### III. GASTROENTEROLOGY-HEPATOLOGY

#### Simple complement

1. **The following are signs of "alarm" in gastroesophageal reflux disease (GERD), EXCEPT:** (256)
   A. Dysphagia
   B. Odynophagia
   C. Anemia
   D. Lower GI bleeding
   E. Weight loss

2. **Indications upper endoscopy in gastroesophageal reflux disease (GERD) are:** (257)
   A. Patient age over 50 years
   B. Atypical symptoms
   C. Failure to PPI therapy
   D. Signs of "alarm"
   E. All of the above

3. **Factors of aggression gastric mucosa are the following EXCEPT:** (263)
   A. The use of NSAIDs
   B. Alcohol
   C. Acid and pepsin secretion
   D. H. pylori infection
   E. Intercellular tight junctions

4. **Which of the following circumstances do NOT constitute an etiopathogenic role in the emergence of ulcer disease?** (264)
A. Drug addiction
B. Gastrinomas of Zollinger-Ellison syndrome
C. Duodenal obstruction
D. Infection with herpes simplex virus type 2
E. Chemotherapy and radiotherapy

5. What is the TRUE statement about the pain of ulcerative syndrome? (265)
   A. It is seated in epigastrium
   B. It presents bar irradiation
   C. The onset is late postprandially (2-3 hours) in gastric ulcer
   D. The onset is postprandially immediate in duodenal ulcer
   E. No improvement at administration of antacids or antisecretory drugs

6. Noninvasive tests for detecting H. pylori are, EXCEPT: (266)
   A. Capillary quick test
   b. Dosage of fecal antigen H. Pylori
   C. ELISA reaction, saliva test
   D. Respiratory tests - urea breath test
   E. Biopsy with histopathology expertise

7. Which of the following is characteristic of ulcerative colitis: (279)
   A. Discontinuous inflammatory process
   B. Uneven distribution
   C. It may evolve from the rectum to the ileocecal valve
   D. Areas of healthy mucosa
   E. Transmural lesions

8. Regarding nicotine the following statements may be made, EXCEPT: (276)
   A. By vasoconstriction it contributes to the onset of the inflammatory bowel disease
   B. Increases intestinal permeability
   C. Has protective effect in ulcerative colitis
   D. Triggers mucosal immune response
   E. Decreases the mucus layer in colitis

9. Corresponding to inflammation extension, ulcerative colitis CANNOT be classified into: (279,280)
   A. Ulcerative Proctitis
   B. Left ulcerative colitis
   C. Ulcerative ileitis
   D. Ulcerative pancolitis
   E. Ulcerative proctosigmoiditis

10. A patient presenting with 7 stools per day, with frequent rectorrages, temperature of 38.5 ° C, pulse 110 / min, the ESR 40 mm / h, according to the Truelove-Witts score, is as follows: (280)
    A. Patient with mild form
    B. Patient with intermediate form
    C. Patient with fulminant form
    D. Patient with severe form
    E. Patient with catarrhal form
11. The following statement is TRUE about the CDAI score used to assess the severity of Crohn's disease: (282)
   A. A score below 150 is a mild disease
   B. A score between 300-400 is the medium form of the disease
   C. A score lower than 150 defines disease remission
   D. A score above 600 defines the severe form
   E. A score above 450 defines the active disease

12. What is the FALSE option on the left colitis? (280)
   A. Represents 40% of all cases
   B. Colic cord is present on palpation
   C. The presence of constipation
   D. The presence of tenesmus
   E. The presence of rectorragies

13. Differential diagnosis of ulcerative colitis can be made with the following conditions, EXCEPT: (286)
   A. infectious colitis
   B. solitary rectal ulcer
   C. ischemic colitis
   D. ulcerative proctosigmoididita
   E. colonic diverticulitis

14. With regard to liver fibrosis, the following statement is FALSE: (303,306)
   A. It is a constant component of cirrhosis
   B. Fibrosis in zone 3 in right heart failure
   C. Fibrosis with nodular transformation of hepatic parenchyma disorganizes organ architecture
   D. Fibrosis in alcoholic liver cirrhosis begins at zone 4
   E. Fibrosis in zone 1 in biliary tract obstruction and congenital hepatic fibrosis

15. With regard to alcohol, etiopathogenic agent of liver cirrhosis, the following statement is: (303,304)
   A. It is the rarest cause of liver cirrhosis in most developed countries
   B. In men with liver cirrhosis, the average consumption is 160 g alcohol / day for 8 years
   C. In women, the cirrhogenous risk occurs at daily amounts of 160 g / day
   D. Given a similar amount of alcohol consumption, the concentration in blood is higher in men than women
   E. On average, 80% of alcoholics develop cirrhosis

16. What are NOT major etiopathogenic agents incriminated in the occurrence of liver cirrhosis? (304)
   A. Hepatitis B, C, D
   B. Alcohol
   C. Toxoplasmosis
   D. Biliary cirrhosis
   E. Autoimmune chronic hepatitis
17. **Risk factors for non-alcoholic steatohepatitis are the following EXCEPT**: (304)
   A. BMI over 28
   B. ALT more than twice the normal value
   C. Ratio AST / ALT above 0.5
   D. Insulin-resistance and diabetes
   E. Hypertension

18. **From a macroscopic viewpoint, cirrhotic liver is NOT**: (306)
   A. Tough with sharp bottom edge
   B. Irregular contour of the lower edge
   C. The golden-yellow color (excessive bilirubin)
   D. Hypertrophic or atrophic
   E. Macronodular or micronodular

19. **Select the FALSE statement in connection with ascites in liver cirrhosis**: (310)
   A. It becomes detectable by inspection in quantities exceeding 1-1.5 L
   B. Ascites grade 1 is a small amount of liquid detectable by ultrasound
   C. The onset is most often insidious
   D. Ascites grade 2 causes a significant abdominal distension with navel displacement
   E. The occurrence of ascites is preceded by flatulence

20. **Which of the following components highlighted by non-invasive tests of liver fibrosis is NOT correct?** (312)
   A. APRI - AST, platelet
   B. Fibrotest - GGT, haptoglobin, bilirubin, apolipoprotein A, α2-macroglobulin
   C. ELF - age, extracellular matrix proteins
   D. FPI - AST, cholesterol, insulin resistance indicator
   E. PGA index - hyaluronic acid, GGT, TIMP-1, cholesterol

**Multiple complement:**

21. **Extradigestive manifestations of GERD are**: (256)
   A. Dysphonia
   B. Asthma
   C. Dysphagia
   D. Non-cardiac chest pain
   E. Odynophagia

22. **Regarding the Los Angeles classification we can say the following**: (257)
   A. It is used to determine the stages in esophagitis, depending on severity
   B. Grade A - one or more losses of substance, none exceeding 5 mm in length
   C. Grade C - confluent, circumferential lesions
   D. Grade B - lesions larger than 5 mm, confluent between two or more plies that exceed 75% of the circumference
   E. Grade D - loss of substance of over 75% of esophagus circumference

23. **About Barrett's esophagus can say the following EXCEPT**: (257,258)
   A. It is an intestinal metaplasia of the proximal esophagus
B. It is confirmed by multiple biopsies
C. In patients without proved dysplasia, immediate endoscopic mucosal resection is recommended
D. In case of low-degree dysplasia, annual endoscopies will be made
E. For early detection of cancer, regular checks are carried out endoscopically

24. **Histaminic H2 receptor blockers:** (258)
   A. They increase the pH by one unit in 48 hours
   B. They have an antisecretory action
   C. They are efficient on symptoms (heartburn)
   D. Their effect increases over time
   E. They have reduced efficacy in healing esophagitis

25. **RGE therapeutic approach shall be:** (258)
   A. It begins with the normal dose of PPI
   B. Graduated therapeutic approach currently used and recommended by most guidelines is "step-up".
   C. In patients who have severe oesophagitis, PPI is recommended for 4-8 weeks and PPI maintenance, depending on the symptoms
   D. In patients with severe esophagitis, PPI is recommended 8 weeks while maintenance is done at the lowest effective dose of PPI
   E. In severe esophagitis refractory to drug therapy, various procedures antireflux may be used.

26. **Endoscopic treatment categories for severe GERD are:** (259)
   A. Radiofrequency
   B. Endoscopic suture of esogastric junction
   C. Nissen fundoplication
   D. Pyloroplasty
   E. Application of hemostatic clip

27. **Cytoprotective agents used in the ulcer disease are:** (270)
   A. Pantoprazole
   B. Cimetidine
   C. Misoprostol
   D. Sucralfate
   E. Bismuth subsalicylate

28. **Standard therapies for H. pylori eradication are:** (270)
   A. Triple Therapy: PPI double dose + Amoxicillin + Clarithromycin, 7-14 days
   B. Triple Therapy is applied 4-6 weeks
   C. Triple Therapy: Amoxicillin + Clarithromycin + Metronidazole 7-14 days
   D. Sequential therapy - PPI double dose for 5-7 days followed by 5-7 days Amoxicillin + PPI double dose + Clarithromycin + Metronidazole
   E. Triple Therapy: Amoxicillin + Cimetidine + Lansoprazole for 7-14 days

29. **Surgical techniques used in the treatment of perforated or penetrating ulcers include:** (271,259)
   A. Gastroduodenal anastomosis Billroth 1
   B. Antrectomy
C. Transmural gastroplicatura Ndo  
D. Gastrojejunal anastomosis Billroth 2  
E. Suture of duodenal perforation  

30. **H2 receptor blockers are, EXCEPT:** (270)  
A. Cimetidine  
B. Nizatidine  
C. Pantoprazole  
D. Famotidine  
E. Misoprostol  

31. **The prevalence of peptic ulcer is dependent on the following comorbidities:** (262)  
A. Chronic obstructive lung diseases  
B. α1-antitrypsin deficiency  
C. Endocrine syndromes such as Zollinger-Ellison and MEN 1  
D. Hypoparathyroidism  
E. Multiple endocrine neoplasia type 2 (MEN 2)  

32. **What are the factors of gastric mucosal defense?** (263)  
A. Optimal mucosal blood flow  
B. Tissue regeneration  
C. Duodenogastral bile reflux  
D. Consumption of NSAIDs  
E. Biochemical functionality of the mucous layer  

33. **Signs of alarm in the ulcer disease are:** (265)  
A. Late satiety  
B. Externalized hemorrhage or detection of an anemic syndrome  
C. Recurrent vomiting  
D. Dysphagia or sudden sore throat  
E. A family history of cancer in the digestive field  

34. **Which of subjective clinical items listed below are included in ulcer disease?** (265)  
A. Dyspepsia  
B. Heartburn  
C. Apical chest pain  
D. Symptoms of anemic syndrome  
E. Clapotage  

35. **Risk factors for rebleeding in upper non-variceal digestive bleeding are NOT:** (268)  
A. Need for heparin administration after endoscopic hemostasis;  
B. Detection of small ulcers  
C. Application of therapy with proton pump inhibitors  
D. Upper gastrointestinal hemorrhage in a patient with severe liver disease  
E. Endoscopic hemostasis applied as single therapeutic resource  

36. **Regarding the treatment of ulcerative colitis in the spurt, the following statements are TRUE:** (294)
A. Severe forms of ulcerative colitis require introduction from the beginning of corticosteroids
B. In left colitis and pancolitis, mild and moderate forms, 5 ASA is administered orally and topically
C. 5 ASA intolerance involves the use of corticosteroids for a limited period of time
D. Forms without a therapeutic response at least 12-14 days from cortisone injection are considered refractory
E. Refractory forms require therapy initiation with cyclosporine or infliximab

37. **What are the emergency indications for surgery in ulcerative colitis??** (296)
   A. Perforation
   B. Dysplasia
   C. Colorectal cancer
   D. Fibrotic strictures
   E. Toxic megacolon

38. **What are the indications for elective surgery for Crohn's disease?** (296)
   A. Abdominal abscesses
   B. Digestive hemorrhage
   C. Colon cancer
   D. Fibrotic strictures
   E. Toxic megacolon

39. **Classes of drugs used to treat inflammatory bowel diseases are::** (292)
   A. Corticosteroids
   B. Aminosalicylates
   C. Biological agents
   D. NSAIDs
   E. Opioids

40. **The diet used in activity flares of the inflammatory bowel disease involves:** (292)
   A. Exclusion of milk
   B. Exclusion of fats
   C. Consumption of raw vegetables
   D. Consumption of fruit
   E. Exclusion of fermented dairy

41. **Evolving primary sclerosing cholangitis may be complicated by:** (291)
   A. Malabsorption of water-soluble vitamins ADEK
   B. Biliary cirrhosis
   C. Urolithiasis
   D. Duct stones
   E. Cholangiocarcinoma

42. **The TRUE affirmations related to the Mayo score used in the intestine inflammatory diseases are:** (286)
   A. It includes both clinic and endoscopic parameters
   B. A lower score than or equal to 2 represent the incipient stage
   C. In the average forms, it ranges between 6-10
   D. In the severe formed, it ranges between 12-15
E. The parameters used are: age diagnostic, location, behaviour

43. The macroscopic modifications characteristic to the Crohn disease are: (285)
   A. Location in any segment of the digestive tract
   B. Frequent strictures
   C. Deep, aftoid ulcers
   D. The frequently affect the left colon
   E. They affect only the mucosa.

44. Regarding the microscopic modifications of the ulcerative colitis they are true, EXCEPT: (285)
   A. The inflammatory infiltrate is focal
   B. Presence of metaplasia of Paneth cells
   C. Depletion of mucus is frequent
   D. Muscular hypertrophy is frequent
   E. Presence of cryptic glands, distorted, with branches

45. Intestine inflammatory diseases are associated with the following genetic syndromes: (275)
   A. Syndrome Down
   B. Syndrome Turner
   C. Syndrome Hermansky-Pudlak
   D. Syndrome Klinefelter
   E. Syndrome Williams

46. What are the consequences of the secretion in excess of inflammatory cytokines? (278)
   A. Decrease of intestinal permeability
   B. Vasoconstriction
   C. Hyper-secretion of mucus
   D. Freeing chemotactic factors
   E. Appearance of anticolon antibody

47. In the ulcerative colitis, the following clinic manifestations are described: (279)
   A. Rectal tenesmus
   B. Diarrhoea syndrome followed by pathological products
   C. Hematemesis
   D. Pain especially in the right hypochondrium
   E. Rectoragy

48. Score Truelove-Witts comprises the following parameters, EXCEPT: (280)
   A. Temperature
   B. VSH (mm/h)
   C. Age diagnostic
   D. Haemoglobin
   E. Pulse

49. Under evolution aspect, the violent form of ulcerative colitis is characterised by: (280)
   A. Altered general state
B. Moderate, repeated outbursts  
C. Diarrhoea with numerous visits to the toilet  
D. Rectal  
E. Evolution over 6 months

50. Crohn disease at the level of the upper part of the digestive tract can be accompanied by:  
(281)  
A. Tenesmus  
B. Duodenal fistulas  
C. Vomit  
D. Nausea  
E. Obstructive jaundice

51. Appreciating the severity of the Crohn disease, according to CDAI score, contains the following variables, EXCEPT: (282)  
A. Presence of complications (arthralgia, arthritis, uveitis, erythema nodosum, fistulas)  
B. Presence of abdominal masses  
C. Hematocrit under 30% in men  
D. Administration of opioid or anti-diarrhoea  
E. Daily general state, for 14 days

52. Paraclinic exploring used in the intestinal inflammatory diseases are: (282)  
A. Endoscopic examination  
B. Excremental markers  
C. Serological markers  
D. pH metry  
E. Urine summary

53. The following modifications represent the expression of mal-absorption in the case of intestinal inflammatory diseases: (282)  
A. Hypomagnesaemia  
B. Hypokalemia  
C. Increase of protein and albumin  
D. Deficit of vitamin B12  
E. Deficit of soluble vitamins

54. Endoscopic modifications at the level of mucosa in ulcerative colitis are: (283)  
A. „Piatră de pavaj”  
B. Serpiginouses ulcers  
C. Friability, spontaneous bleeding at touch  
D. Pleomorphic ulcerations  
E. Erosions

55. The most frequent cutaneous extra-intestine manifestations of the cutaneous intestine inflammatory diseases are: (290)  
A. Psoriasis
B. Pyoderma gangrenosum  
C. Lupus erythema  
D. Erythema nodosum  
E. Pityriasis versicolor  

56. Diagnostic of lung manifestations in the intestine inflammatory diseases is done by: (291)  
A. Thoracocentesis  
B. Computer CT  
C. Allergy tests  
D. Functional respiratory tests  
E. Paracentesis  

57. The main objectives of the treatment of the intestine inflammatory diseases are: (292)  
A. Treatment of active outbursts  
B. Maintaining the remission and prevention of relapse  
C. Induction of clinic, endoscopic, histological remission  
D. Prevention and treatment of complications  
E. None of the above  

58. Which are the TRUE affirmations regarding spontaneous bacterial peritonitis? (327)  
A. Diagnostic is based on the examination of the ascites liquid  
B. Forms with positive cytology and negative cultures are called neutrocitar ascites  
C. Forms with poor cytology and positive cultures are called bacterial ascites  
D. Treatment of elections is done with penicillin G  
E. Etiology is always plurimicrobian  

59. Additional criteria of diagnostic in kidney complications of cirrhosis are: (326)  
A. Inconstancies  
B. Oligoanuria under 500 ml/day  
C. Na urinary under 10 mEq/day  
D. Urinary osmolarity is less than the plasmatic one  
E. Na serum under 130 mEq/L  

60. About the classification West-Haven of hepatic encephalopathy the following are TRUE: (324)  
A. Degree 3 – somnolence, temporal and spatial disorientation, significant confusion, hyper tendon  
B. Degree 1 – confusion, depression, dysarthria, reverse of nictemeral rhythm, modifications of behaviour  
C. Degree 4 – coma, osteotendinous hyper-reflexion, muscular hypertonic, asterixis  
D. Degree 2 – dizziness, inadequate behaviour, lethargy, bradilalie, amnesia, somnolence, asterixis, hypertonic-sign of cogwheel  
E. Degree 3 – modifications of disposition and behaviour, inability to carry out mental activities, lethargy, somnolence  

61. Objectives of the therapy in hepatic encephalopathy are: (324)  
A. Increase of the protein contribution to the liver  

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B. Fighting cerebral toxicity of NH3
C. Supporting hepatic function
D. Fighting precipitant factors
E. Vegetal proteins are counter indicated

62. What are the correct affirmations regarding the prophylactic surgery interferences used in HDS, complication of cirrhosis? (322)
A. Are represented by the porto-caval shunts
B. Increase the risk of bleeding again, without improving the mortality
C. Are counter indicated in class Child C
D. Are counter indicated in class Child B
E. The shunts can diminish encephalopathy

63. Precipitant factors to install the frame of hepatic encephalopathy are: (323)
A. Hydroelectrolytic depletion
B. Reduced protein contribution
C. Constipation
D. Administration of hepatic toxins
E. Administration of cerebral toxins

64. Signs and clinical symptoms of hepatic encephalopathy include the following, EXCEPT: (323)
A. Alterations of consciousness: apathy, confusion, stupor, dizziness, psychiatric troubles
B. Modifications of personality: irritability, juvenile behaviour, euphoria, lack of familial interest
C. Vegetative troubles: less sleep, hypo ventilation, central hyper pyrexia
D. Abolishes bone-tendon reflexes
E. Sensomotory and reflex troubles: asterixis, transitory amaurosis, extra-pyramidal hypertonic

65. Objectives of treatment in superior digestive haemorrhage are as the following: (321)
A. Altered fluid re-balance
B. Prevention of infections by administration of antibiotic in the class of penicillin
C. Prevention of relapse
D. Prevention of encephalopathy
E. Stop the haemorrhage

66. Risk of varices bleeding in cirrhosis is NOT correlated with the following factors: (321)
A. Dimensions of varices
B. Blue coloration
C. Presence of red signs (red color sign)
D. Presence of white marking (white wales marking)
E. Absence of erosions

67. Pathogenic treatment of cirrhosis aims the following mechanisms: (319)
A. Reducing the hepatic inflammation
B. Alteration of the ways of intra-cell signalling
C. Increase of extra cell matrix synthesis
D. Decrease of collagen fibre degradation
E. Apoptosis of stellate cells

68. Regarding the treatment of the metabolic forms of cirrhosis, the following are TRUE: (319)
   A. Patients with hemochromatosis can be treated by repeated vein sections
   B. In Wilson disease, D-penicilamin can be administered
   C. Treatment with iron chelators is indicated to patients with hemochromatosis
   D. Treatment in Wilson disease is maintained at the initial dose for minimum 18 months
   E. In Wilson disease it is recommended the administration of desferrioxamine

69. Regarding the hepatomegaly of stasis, the following are TRUE: (316)
   A. It appears in illnesses accompanied by right heart failure
   B. Has hard consistency
   C. It is sensitive to touch
   D. It is associated with splenomegaly
   E. It presents hepatojugular reflux

70. The clinic frame in secondary biliary cirrhosis associates the following: (314)
   A. Cholestasis
   B. Steatorrhoeic
   C. Malabsorption
   D. Increase of urine excretion of copper
   E. Cardiomyopathy by iron deposits

71. Primitive biliary cirrhosis is characterised clinically as follows: (313)
   A. Symptom of beginning is jaundice
   B. Jaundice is accompanied by hypochromic urine, constipation
   C. Cutaneous xanthomas are found
   D. Fractures on pathological bone can be produced because of osteoporosis
   E. Slow weight gain

72. Cutaneous-mucosa modifications in the syndrome of hepatic failure are: (309)
   A. Vascular stars
   B. Palm erythema
   C. White nails
   D. Red spots on arms
   E. Jaundice

73. TRUE affirmations regarding the Mallory bodies are: (307)
   A. They are suggestive for the hepatic cirrhosis of infectious etiologic
   B. They represent the presence of extracellular and intracellular hyaline
   C. They are suggestive for the primitive biliary cirrhosis
   D. They are suggestive for the cirrhosis of alcoholic etiologic
   E. They are frequently found in hemochromatosis

74. Disruption of protein metabolism in hepatocellular failure is manifested by the following, EXCEPT: (307)
A. Increase of albumin synthesis  
B. Troubles in ureogenesis with increase of amoniemia  
C. Troubles in metabolism of biliary acids  
D. Decrease of concentration of tyrosine, methionine and phenylalanine  
E. Disruptions in the degradation of some hormones  

75. The following are absolute counter indications of hepatic transplant, EXCEPT: (320)  
A. Infection HIV uncontrolled or AIDS  
B. Physical or psychological impossibility to stand the surgery  
C. Old age  
D. Kidney illnesses accompanied by kidney failure  
E. Presence of advanced cardiac or lung disease  

76. The medicine aiming at slowing down or stopping fibrosis progression in hepatic cirrhosis is:  
   (319)  
A. Colchicine  
B. IL-8  
C. Antioxidants  
D. Ursodeoxycholic acid  
E. Pentoxifylline  

77. Regarding the histological stages in the primitive biliary cirrhosis, the following are TRUE:  
   (314)  
A. Stage 2 – dominated by the appearance of fibrosis  
B. Stage 4 – cirrhosis  
C. Stage 1 – dominated by the appearance of fibrosis  
D. Stage 3 – dominated by the appearance of fibrosis, inflammation diminishes  
E. Stage 0 – ductular lesions of inflammatory type  

78. From the clinic point of view, the upper digestive haemorrhages in hepatic cirrhosis are  
   characterised by: (321)  
A. Associate signs of acute haemorrhagic anaemia  
B. Repetitive haematemesis followed by melaena  
C. Varices haemorrhages are usually discreet  
D. Varices haemorrhages are usually associated with abdominal pain  
E. Diagnostic can be confirmed by touch or nose-gastric aspiration  

79. Regarding the treatment of chronic hepatic failure, the following affirmations are TRUE:  
   (319,320)  
A. Treatment of portal high blood pressure means the administration of beta-blocking or mononitrates  
B. Treatment of ascites means moderate physical movement, sodium restriction, administration of penicillamine  
C. TIPS is used, placed under fluoroscopic guiding in refractory ascites  
D. Patients need repeated paracentesis of minimum over 5 litres (associated or not with administration i.v. of human albumin)
E. It is recommended diet, rest in bed and administration of vitamin supplements and liver protective

80. Non invasive Forns test, used to evaluate hepatic fibrosis, comprises the following components: (312)
   A. Platelets
   B. AST
   C. GGT
   D. Apolipoprotein A
   E. Cholesterol

IV. DIABETES MELLITUS

Simple complement:
1. The following are criteria of positive diagnostic of diabetes mellitus, EXCEPT: (333) U
   A. HbA1c ≥ 6.5 %
   B. Glycaemia ≥ 200mg/dL in any moment of the day in the asymptomatic subject
   C. Glycaemia à jeun ≥ 126 mg/dL
   D. Glycaemia ≥ 200 mg/dL 2 hours after load of glucose (TTGO)
   E. Glycaemia ≥ 200 mg/dL in any moment of the day in the subject presenting: polyuria, polydipsia, polyphagia, weight loss

2. Which of the following statements regarding the gestational diabetes is TRUE? (333,335) M
   A. It appears in about 0.7 % of the pregnant women
   B. It is represented by any disruption of glycaemia that is diagnostic during pregnancy: DZ, alteration of glycaemia à jeun, decrease of tolerance to glucose
   C. It is a specific type of diabetes, previously called secondary D and it represents 1-2 % of all the cases of diabetes
   D. Because a large number of the women with diagnostic of gestational DM can have DM type 2 before pregnancy, it is recommended that 6-12 days after birth to be carried out a provoked hyper glycaemia with 75 g glucose, to check the persistence of DM
   E. For the positive diagnostic, the value of glycaemia à jeun must be ≥ 126 mg/dL (after week 24)

3. Which of the following does NOT represent an acute complication of the diabetes mellitus? (335) U
   A. Hyperosmolar diabetic coma (CHOD)
   B. Diabetic ketoacidosis (CAD)
   C. Lactic acidosis (AL)
   D. Arteriopathy of the lower limbs
   E. Hypo glycaemia

4. A patient with diabetic ketoacidosis (CAD) with pH= 7.25, excess bases= -12 mEq/L, alkaline reserve = 13 mEq/L, conform to the Astrup parameters presents: (336) M
   A. CA incipient
   B. CA moderate
   C. CA advanced (pre-coma)
   D. CA severe (coma)
5. A diabetic patient presents modifications of eRFG =50 ml/min/1.73 m² and a ratio albumin/urinary creatinine = 200 mg/g, values persistent for a period longer than 3 months. According to the KDIGO guide, the prognostic of the chronic disease of kidneys of the patient, on taking in consideration the two elements, is: (342) G
A. High risk
B. Very high risk
C. Moderate to high risk
D. Normal or slightly high risk
E. Does not present risk

Multiple complement:
6. Among the categories of high risk for diabetes (pre-diabetes) does NOT make part: (333) M
A. Glycaemia à jeun 110-125 mg/dL is defined as the alteration of the tolerance to glucose (IFG= Impaired Fasting Glucose)
B. Glycaemia à jeun ≥ 126 mg/dL (harvested more than 8 hours from the last meal)
C. Glycaemia with value between 5.7-6.4%
D. Glycaemia of 200 mg/dL 2 hours after TTGO is defined as the alteration of the tolerance to glucose (IGT= Impaired Glucose Tolerance)
E. Glycaemia of 140-199 mg/dL 2 hours after loading with glucose in the case of hyper glycaemia provoked with 75 g glucose (IGT= Impaired Glucose Tolerance)

7. Regarding the etiological classification of DM, which of the following affirmations are TRUE? (334) G
A. Diabetes of type 1 (previously DM non dependent on insulin) appears by the progressive alteration of the secretion with insulin
B. Diabetes of type 2 (previously DM insulin-dependent) is characterized by absolute of insulin, given by the destruction of beta cells
C. Syndrome MODY represent 10 % of the patients with DM of type 2
D. Gestational diabetes appears in about 7 % of the pregnant women
E. Diabetes lipoatrophic is determined by an anomaly of transmission of post-receptor signal

8. The TRUE affirmations regarding the treatment of diabetic ketoacidosis are: (337) M
A. Primary prevention aims at fighting the favouring factors
B. Secondary prevention means fighting the complications induced by the unexpected treatment of the acidoacetozica coma
C. Fighting hyper glycaemia with insulin with intermediary action (Humulin N), in initial bolus, followed by perfusion i.v. until the disappearance of ketonuria
D. Fighting acidosis is done when pH is < 7,3
E. Correcting the deficit of $K^+$ starts with minimum one hour of treatment, and the quantity is related to the values of the ionogram, the presence of dieresis and the aspect of ECG

9. Diabetic hyperosmolar coma in the state period is characterised by: (338) U
A. State of severe dehydration
B. Hypothermia
C. Neurologic troubles
D. Hyponatremia
10. **Which of the following statements are NOT true regarding the lactic acidosis?** (339) M
   A. Medicine such as biguanide, salicylates and antiretrovirals can be precipitant factors
   B. The prodromal period is characteristic and constant, with progressive muscular asthenia and muscular cramps
   C. During the state period, the Küssmaul respiration (with smell of acetone) appears
   D. The ratio lactic acid/pyruvic acid is increased over 10/1
   E. The prognostic is severe and mortality is 30-70%

11. **Triad Whipple is defined by:** (339) U
   A. Decrease of glycaemia under 70 mg/dL
   B. Remission of symptomatology after contribution of glucagon
   C. Symptoms and specific signs
   D. Remission of symptomatology after contribution of glucides
   E. It is characteristic to hyper glycaemia

12. **Signs of simpatoadrenergic activation in the case of hyper glycaemia are:** (340) U
   A. Somnolence
   B. Tachycardia
   C. Ataxia
   D. Anxiety
   E. Pale colour

13. **Which of the following situations regarding the classification of the diabetic nephropathy (Mogensen) are FALSE?** (342) M
   A. Stage I silent: kidneys of increased volume, glomerular membrane thickened, albuminuria, TA normal
   B. Stage II, of hyper function/hyper filtration glomerular: expanded mesangium, normal albuminuria, TA normal/slightly increased
   C. Stage III, early diabetic nephropathy: persistent microalbuminuria (>200 µg/min)
   D. Stage IV, clinic or patent (overt) diabetic nephropathy: severe glomerular sclerosis, albuminuria in early stage >200 µg/min with continuous tendency of growth
   E. Stage V, of IRC terminal: glomerular diffuse sclerosis, filtrated low glomerular, under 30ml/min/1.73m²

14. **Regarding the diabetic nephropathy, which of the following statements are TRUE?** (343) M
   A. It is the earliest and most frequent complication of DM
   B. The mechanisms by which the hyper glycaemia can determine the diabetic nephropathy can be ischemic and metabolic
   C. The diabetic poly neuropathy has as main pathogenetic mechanism the ischemia
   D. The focal and multifocal neuropathy has as are main pathogenetic mechanism the metabolic troubles
   E. In the diabetic poly neuropathy, the tendon reflexes are abolished

15. **Among the most frequent manifestations found in autonomous neuropathy in DM, do NOT belong:** (344) U
   A. Orthostatic low blood pressure
B. Diarrhoea mainly at day time
C. Sleep apnea
D. Neurogenic bladder
E. Anasarca

16. **Particularities of the neuropath gangrene are, EXCEPT:** (345) U
   A. Arterial pulse absent
   B. Cyanotic or pale skin, with low temperature
   C. Humid or dry gangrene
   D. ROT abolished
   E. Answers favourably to treatment by medicine taken early, if there are no bone injuries

17. **Select the FALSE variants regarding the Charcot leg:** (346) G
   A. It is also called diabetic osteoarthropathy or neuropath leg
   B. It appears in 5% of the patients with DM
   C. The leg is deformed, shortened, with the fall of the plantar vault
   D. Pulse is usually absent and without troubles of the tactile, thermal, painful, vibratory sensitiveness
   E. The beginning can be acute or insidious

18. **Prandial insulin is:** (349) U
   A. Lispro
   B. Aspart
   C. Humulin R
   D. Detemir
   E. Glulisine

19. **Select the FALSE statements regarding the prandial insulin:** (349) G
   A. They are represented by analogies of insulin with rapid action and insulin of short-term action
   B. They can be administered under the skin and are the only ones that can be administered intra-vein, intramuscular and in the pumps of insulin
   C. The human insulin with short-term action have a reduced effective duration of action in total, comparing with rapid analogues of insulin
   D. Insulin with short action have a duration of action comprised between 3-5 hours
   E. Analogue of insulin with rapid action have the beginning of action 10-15 minutes after the administration.

20. **Incretinmimetics (IM):** (348) G
   A. Include analogues of the receptor GLP-1: Exenatide, Liraglutide
   B. Include inhibitors dipeptidil-peptidaze-4: Sitagliptin, Saxagliptin, Vildagliptin
   C. The hypo glycaemia effects are due to the improvement of the secretion of insulin, dependent on glucose;
   D. The hypo glycaemia effects are due to the increase of apoptosis beta-cellular
   E. Can associate in double therapy with biguanides

21. **What are the important causes in the appearance and evolution of the diabetic gangrene?** (345) U
   A. Inflammatory factor
   B. Diabetic neuropathy
C. Vascular factor
D. Infectious factor
E. HbA1c value

22. **Regarding the cardio-vascular illness in DM, we can state, EXCEPT:** (345) M
   A. Chronic ischemia cardiopathy (CIC) is 2-3 more frequent, earlier and more severe than in non-diabetic patients
   B. Myocardial infarction (IMA) is 10 times more frequent than in non-diabetic patients
   C. Arteriopathy of lower limbs appears in 60 % of the patients with DM
   D. In stage 2 of arteriopathy of lower limbs, the pain in the decubitus appears
   E. The vascular disease of the supra-aortic trunks is more frequent than 3 times than in the non-diabetic patients

V. HEMATOLOGY- ONCOLOGY

**Simple complement:**

1. **Regarding the iron metabolism (Fe) the following statements are correct, EXCEPT:** (354)
   A. Compounds Fe can be found in the fraction hem of some proteins or related to a protein
   B. Ferritin is the main form of Fe deposit
   C. Average quantity of iron in the daily diet is about 10-15 mg/day
   D. The inorganic iron is tied to food rich in phytates and phosphates that stimulate absorption
   E. Majority of Fe (80-90 %) is used for Hb, myoglobin and cytochromes

2. **Which of the following is NOT a sign/symptom related to the direct effects of the deficit of Fe on the tissues?** (356)
   A. Glossitis
   B. Angular cheilitis
   C. Koilonychia
   D. Blue sclerotic
   E. Gastric hypertrophy

3. **The symptoms/signs that can be related to the intravascular hemolysis in case of haemolytic anaemia can be, EXCEPT:** (358)
   A. Fever
   B. Shivering
   C. Lumbar pain
   D. Splenomegaly
   E. Kidney failure

4. **The daily recommended intake (DRI) of vitamin B12 and folic acid are, EXCEPT:** (362)
   A. DRI of folate acid (FA) in adults (men/women who are not pregnant) is 400 µg
   B. DRI of FA in pregnant women is 600 µg
   C. DRI of FA in women who breastfeed is 500 µg
   D. DRI of vitamin B12 is 2.4 µg in pregnant women
   E. DRI of vitamin B12 in women who breastfeed is 2.8 µg
5. **Which of the following statements regarding the epidemiology of leukaemia is TRUE?** (394)
   A. LAM can affect all the age groups and represent 15-20% of the leukaemia of adults
   B. LAL is found more frequently in children, represents about 75% of the cancers appeared until the age 14 and 25% of the types of leukaemia in paediatrics
   C. LMC can appear at any age with an incidence of about 3/100,000/year
   D. LLC in most cases appears after age 50 and is more frequent at the white race and in the western countries
   E. The most frequent form of leukaemia that represents 25-30% of the total number of leukaemia is LMC

6. **Which of the following does NOT represent a type of LAM according to the morphologic classification FAB?** (372)
   A. LA non-differentiated
   B. LA myelogenous with maturation
   C. LA with multi-linear dysplasia
   D. LA mielomonoblastic
   E. Acute erythroleukemia

7. **Factors of prognostic unfavourable in LAM are, EXCEPT:** (376)
   A. Leukocytosis over 50,000/mm³ at the beginning
   B. Anomalies of gene FLT3
   C. Syndrome CID
   D. Subtypes M0, M5, M6, M7
   E. Gene of fusion PML-RARα

8. **According to the morphologic classification FAB, LAL 3 is characterised by:** (381)
   A. Micro lymphoblastic form, with lymphoblasts of more reduced size
   B. Macro lymphoblastic form, with lymphoblasts of larger size
   C. It is found most frequently in children and 25-30% of the adult patients
   D. Form with Burkitt-like cells of large size
   E. It is found most frequently in adults (70% of the cases)

9. **Chromosome Ph1 is the specific al marker:** (385)
   A. LAL
   B. LMC
   C. LAM
   D. LLC
   E. Lymphoma Burkitt

10. **The most constant sign found in LMC is:** (386)
    A. Hepatomegaly
    B. Neurologic manifestations
    C. Splenomegaly
    D. Adenopathy, generalized and asymmetrical
    E. Leukaemia injuries of the skin

11. **About the score Sokal we can state the following, EXCEPT:** (388)
A. It is based on the patient’s age
B. It is based on the size of the spleen and the percentage of blasts at the moment of the diagnostic
C. It identifies the group of the ill with low risk (score <0.8) and RCyC (complete cytogenetic answer) 91%
D. It was elaborated for patients treated with interferon α (α-interferon)
E. It identifies the group of the ill with high risk (score 1.2) and RCyC 69%

12. Identify the FALSE variant referring to the genetic factor ZAP-70: (395-399)
A. It is a cytoplasmic protein (a tyrosine kinase)
B. It is normally expressed on the lymphocytes T
C. Its presence suggests a favourable prognostic
D. It is present in LLC, characterized by non-mutant status of the gene for the heavy chain of Ig
E. It is associated with the absence of the mutation Ig V_H (germline Ig V_H)

13. The objective exam in LLC can underline, EXCEPT: (396)
A. Generalized and symmetrical adenopathy
B. Hepatomegaly, in 60-70% of the cases
C. Splenomegaly, most often moderate
D. Skin leukaemia injuries, in form of pruritic dermatitis
E. Infiltrations in the internal organs: salivary and tear glands (syndrome Mikulicz)

14. Starting the treatment in LLC is done in the presence of the following elements that indicate the progression of the disease, EXCEPT: (400)
A. General symptoms: weight loss, transpiration at night >1 month
B. Progressive renal medullary with anaemia and/or thrombocytopenia
C. Anaemia and/or immune thrombocytopenia non-responsive to corticosteroids
D. Symptomatic hypergammaglobulinemia
E. Progressive or symptomatic splenomegaly (compressive)

15. According to classification OMS 2008, the malign lympho-proliferation of line B are, EXCEPT: (405)
A. Lymphoblastic lymphoma
B. Chronic lymphatic leukaemia B
C. Multiple myeloma
D. Lymphoma of the manta area
E. Mycosis fungoides/syndrome Sezary

16. According to the stages by Ann Arbor, a patient with LH who presents laterocervical, mediastinal and inguinal lymphadenopathy, fever, ganglion masses of 9 cm in diameter, proportion mediastinum/thorax of 0.3 and right lung infiltration, contiguous at mediastinal adenopathy, the stage of this patient will be: (410)
A. IIBEX
B. IIAEX
C. IIIBE
D. IIBEX
E. IIIBE
17. Regarding the clinical manifestations in LH the following are true, EXCEPT: (407)
   A. Fever appears in the lack of other causes (infections) and the continuous character is typical (fever type Pel Ebstein)
   B. Ganglions can reach dimensions of over 10 cm (“bulky”)
   C. Symptoms B: weight loss-fever-transpiration are typical
   D. Can appear splenomegaly, hepatomegaly, extra-ganglion infiltrations (in advanced cases)
   E. Rarely, adenopathy appears under the diaphragm (inguinal, abdominal)

18. Which of the following immunophenotypic markers found in LNH is a non-specific marker for the proliferating cells in the cellular cycle? (416)
   A. Ki-1
   B. Cyclin D1
   C. BCL-2
   D. Ki-67
   E. CD-25

19. According to the prognostic index IPI (International Prognostic Index), a patient aged 65 with LNH diffuse with large cells B, Stage II Ann Arbor, LDH increased and the performance index 2, is framed in the risk group: (418)
   A. No risk
   B. Low/intermediary
   C. Intermediary/increased
   D. Low
   E. Increased

Multiple complement:

20. Regarding the paraclinical explorations in the iron-deficiency anaemia the following statements are CORRECT: (356)
   A. The first sign is the decrease MCV, followed by the increased RDW
   B. Increased level of Fe serum and the capacity of tying of the Fe (CTLF)
   C. A saturation of the transferrin <10% with increased CTLF confirms the diagnostic of iron deficiency
   D. Serum ferritin reflects the Fe deposit in the body, a value lower than 12 mg expresses iron deficit
   E. The osteomedular biopsy confirms the diagnostic

21. In the smear of peripheral blood in iron-deficiency anaemia can be present: (356)
   A. Erythroblastic with nucleus (rare)
   B. Hypocrome erythrocytes
   C. Cells in sign of aiming at a target
   D. Erythrocytes, microcytes
   E. Erythrocytes with aniso- and poikilocitosis

22. The following examples represent causes of the iron deficiency, EXCEPT: (355)
   A. Causes of gastrointestinal bleeding: syndrome GAVE, parasite infections, Meckel diverticulum
B. Prematurity, half of the iron deposit in new-born babies being accumulated in the last 3 months as a foetus
C. Poor diet in phytates and phosphates – vegetarian diet (stimulates the absorption)
D. Increased consumption of meat
E. Self-induced bleeding (auto-phlebotomy)

23. **About the autoimmune hemolytic anaemia with antibodies at heat we CANNOT say that:** (360)
   A. Antibodies are of type IgM, the direct antiglobulin test is positive for the complement C3
   B. The primary location of the hemolysis is the spleen
   C. The smear of peripheral blood presents microsferocites
   D. Diagnostic is based on signs/symptoms and paraclinical explorations of a hemolytic anaemia with the positive Coombs test
   E. Splenectomy is considered as therapy of first intention

24. **Regarding the agglutinins disease at cold, the following statements are TRUE:** (361)
   A. Antibody IgM is headed against red blood cells, tying to them preferably at low temperatures (4-18°C)
   B. The primary location of the hemolysis is in the hepatic macrophages
   C. The severe disease appears in the old people, often associated with lymphoma, LLC
   D. Splenomegaly is friable, it can break at a vigorous examination
   E. Splenectomy is considered the second line of treatment after the treatment failure with folic acid

25. **Paroxysmal hemoglobinuria at cold:** (361)
   A. It is a rare disorder, 1% of the autoimmune hemolytic anaemia
   B. It appears more frequently in adults after a recent bacterial infection
   C. It is the result of a circulating antibody IgM that ties to the antigenic system P at low temperatures, fixing the complement C3
   D. Symptoms appear after the exposure to cold
   E. Tests for antibodies Donath-Landsteiner are positive

26. **Megaloblastic anaemia is due to the lack of:** (362)
   A. Vit. B12
   B. Vit. B9
   C. Vit. B1
   D. Acid folic
   E. Vit. B6

27. **Deficit of vitamin B12 can be due to, EXCEPT:** (363)
   A. Hypergammaglobulinemia
   B. Effects of some medicine: metformin, colchicine
   C. Syndrome Zollinger-Ellison
   D. Disorders of intestinal motility - scleroderma
   E. Receptors Cubam absent or diminished: syndrome Imerslund Grasbeck hereditary

28. **Which of the following situations can be the causes of the pholates deficit?** (363)
   A. Syndrome Lesch-Nyhan
   B. Psoriasis
C. Sprue tropical/non-tropical
D. Orotic aciduria
E. Methotrexate

29. About pernicious anaemia we can say, **EXCEPT**: (364)
   A. The autoimmune destruction of the gastric fundus cells determines gastric atrophy
   B. The average age for pernicious anaemia is 60; all ages and races are affected
   C. The autoimmune destruction of the gastric fundus cells determines the absence of FI and achlorhydria
   D. Antibodies anti-FI are present approximately 75% in serum, and approximately 60% in gastric juice
   E. It is associated with autoimmune diseases: DM-type II, hyperparathyroidism

30. Macrocytic anaemia, with no. reticulocytes >2% and response to hemolysis can be found in the following contexts: (368)
   A. Infectious hemolysis (malaria)
   B. Aplastic/hypoplastic anaemia
   C. Erythroleukaemia (rare)
   D. Deficit of glucose 6-phosphate dehydrogenase
   E. Paroxysmal nocturnal hemoglobinuria

31. **Regarding the prevention of deficit of vit. B12 and folates, the following are TRUE**: (369)
   A. Prevention with vit. B12: postgastrectomy, administered orally for a period of 12 months
   C. Preconception supplements with AF: to women in the fertile period, in case they take anticonvulsants
   D. Supplements with AF daily: to reduce the toxicity of the methotrexate
   E. If vit. B12 is administered to a patient with deficit of AF, the patient can develop progressive neurologic deterioration

32. **Regarding the classification OMS of LAM, the following statements are TRUE**: (373)
   A. They are based on the cytochemical and cytogenetic molecular aspects that complete the data of the morphological classification FAB
   B. They are based on the specific markers expressed in various stages of development by the lymphoid progenitors and precursors B and T
   C. LAM with multi-linear dysplasia are divided into: according to SMD or SMD/SMP
   D. LAM non-classified as such correspond to some sub-types FAB
   E. They are divided into: LAM of line B (85%) and LAM of line T (15%)

33. **Which of the following represent signs of bone marrow failure?** (373)
   A. Anaemic syndrome
   B. Infectious syndrome
   C. Inflammatory syndrome
   D. Syndrome of leucostasis
   E. Hemorrhagic syndrome

34. **Select the FALSE statements referring to promyelocytic LA**: (372-375)
A. According to the morphological classification FAB of LAM, it is included in the category M3 and presents 30% hypergranular promyelocytes
B. With the disease, also appears a syndrome of disseminated intravascular coagulation (DIC) produced by the thromboplastin freed by the granulations of the promyelocytes
C. The osteomedular biopsy must be carried out to obtain data of flow-cytometry, cyto-genetics and molecular examinations
D. It is associated with t (8; 21), with a favourable prognostic of the disease
E. The treatment is done as early as possible with ATRA- acid all trans-retinoic in monotherapy

35. **Regarding the paraclinic examinations in LAM, the following statements are FALSE:** (374)
   A. The medulogram confirms the diagnostic by underlining at least 20% blasts with leukaemia infiltration
   B. Bone marrow usually presents hypoplasia
   C. Myeloblasts present positive reaction for myeloperoxidase (MPO)
   D. Modifications such as t (8; 21), t (15; 17), are associated with an unfavourable prognostic of the disease
   E. The examination of the myocardial function is indicated in the context of cardiotoxicity of some cytostatics or the application of thorax radiotherapy

36. **Criteria of a complete hematologic remission (CR) are:** (377)
   A. Bone marrow with normal cellularity (5% blasts, normal representation of the trilinear hematopoiesis)
   B. Normalisation of the peripheral blood (absence of blasts)
   C. CR is synonymous with healing
   D. Absence of organomegaly
   E. Moderate splenomegaly

37. **The syndrome of retinoic acid (SRA) that appeared during the treatment with ATRA is characterised by:** (379)
   A. Fever
   B. Weight loss
   C. Respiratory distress
   D. Hypoxemia
   E. Serositis with pleural or pericardia illness

38. **Regarding the LAM treatment, we CANNOT say that:** (377)
   A. As attitude of emergency, it is recommended leukapheresis in cases of hyperleukocytosis - $10^6$/l
   B. Growth factors (G-CSF or GM-CSF) are indicated as routine, because they can reduce the period of aplasia post-chemotherapy
   C. To prevent hyperuricaemia, hydration and allopurinol are recommended
   D. The treatment consists in two phases: of remission induction and consolidation
   E. The maintenance treatment brings obvious benefits

39. **The induction treatment of the remission in LAM refers to:** (377)
   A. It is recommended the association of an anthracyclines with vincristine, corticosteroids, cyclophosphamide and asparaginase
B. It is used the regime “3+7” and it consists in the administration of an anthracycline associated with cytosine arabinoside.

C. 3-4 weeks after the treatment, the bone marrow is evaluated to appreciate the therapeutic response.

D. The lack of complete remission (CR) imposes the administration of another 1-2 treatments with Ara-C, at an interval of 7 days.

E. After the induction treatment, the rate of CR is 60-80% in the patients younger than 60 years old.

40. In LAM, the treatment of relapses or refractory cases is NOT done with: (378)
   A. Large doses of Ara-C associated with fludarabine, etoposide or idarubicin and G-CSF
   B. Scheme Hyper-CVAD: large doses of Ara-C or methotrexate, in combination with anthracyclines, corticosteroids, anti-metabolites
   C. Scheme R-FC: fludarabine in combination with cyclophosphamide and rituximab
   D. Scheme MEC- combination mitomycin + etoposide +Ara-C
   E. Scheme CLAG-M- combination cladribine + Ara C + mitoxantrone + filgrastim

41. Diagnostic LAL is based on the presence of: (382)
   A. The 3 syndromes (anaemia, inflammatory, bleeding)
   B. At least 20% atypical blasts
   C. Immunophenotype and genetic investigations
   D. The 3 syndromes (anaemia, infectious, bleeding)
   E. At least 20% lymphoblasts in the bone marrow and/or peripheral blood

42. The main complications leading to the death of the patients having LAL are: (383)
   A. Infections
   B. SNC disease
   C. Hypoxia
   D. Haemorrhages
   E. Respiratory failure

43. Differential diagnostic of LAL is done with: (383)
   A. LAM
   B. Aplastic anaemia
   C. Infectious mononucleosis
   D. LLC
   E. Secondary LAL in the stage of transformation of a LMC (when the chromosome Ph1 is absent)

44. Paraclinical examinations in chronic phase of LMC underlines: (387)
   A. Hyperleukocytosis (100,000-300000/mm³)
   B. Thrombocytopenia (40-50,000/mm³)
   C. FAL is increased
   D. Bone marrow is rich, hyper cellular, with predominance of granulocytes (80-90%)
   E. Chromosome Ph1 or transcript BCR-ABL

45. Non-specific symptoms that can appear in the chronic stage of LMC are, EXCEPT: (386)
   A. Asthenia
   B. Severe transpirations (more rare)
C. Sensation of embarrassment or weight in the right hypochondrium (because of hepatomegaly)
D. Renal colic
E. Fatigability

46. **Factors of negative prognostic of LMC are:** (388)
   A. Age over 60
   B. Splenomegaly at more than 10 cm under the costal
   C. Thrombocytopenia or a number of platelet of 700,000/mm³
   D. Basophil over 3% in peripheral blood
   E. Basophil over 7% in bone marrow

47. **Phenomena that announce the severe disease (blastic spurt) LMC can be:** (389)
   A. Appearance of the signs of bone marrow failure
   B. Infectious complications and haemorrhage
   C. Pain in the bone
   D. Syndrome of leucostasis
   E. Onset of resistance to treatment

48. **Supportive therapy in the chronic phase of LMC must be taken into account for:** (390)
   A. Fighting leukocytosis (in cases with leukocytes 300,000/mm³): administration of hydroxyurea, leukapheresis
   B. Fighting infections: preventive anti-biotherapy
   C. Fighting thrombocytosis: administration of hydroxyurea / anagrelide
   D. Cardio-vascular and respiratory reanimation of the septic shock or massive haemorrhage
   E. Prevention of syndrome of tumour lysis by administration of allopurinol

49. **Inhibitors tyrosine kinase (TKI) of second generation are:** (390)
   A. Dasatinib
   B. Ibrutinib
   C. Idealisib
   D. Nilotinib
   E. Bosutinib

50. **In patients with LMC in chronic phase that present intolerance to the initial treatment (of first line), the following therapies can be used:** (391)
   A. Tipifarnib
   B. Lonafarnib
   C. Bosutinib
   D. α-IFN pegylat
   E. Transplant of stem cells (HSCT)

51. **Peripheral blood test in LLC underlines:** (396)
   A. Hyperleukocytosis with absolute lymphocytosis
   B. Frequency of the so-called “cellular shadows” Gumprecht
   C. Anaemia, with microcytic, hyperchromic character
   D. The normal initial number of platelet decreases in the advanced stages of the disease
   E. The absolute number of granulocytes and monocytes can be normal at the beginning and gradually decreases with the accentuation of the bone marrow failure
52. **The positive diagnostic of LLC can be maintained in the presence of the following elements:** (397)
   A. Presence of CD38 or ZAP-70
   B. Absolute lymphocytosis in the peripheral blood, over \(5000/mm^3\), with morphology of mature type, maintained for minimum 3 months
   C. At least 30% lymphocytes at marrow level
   D. Lymphocytes of monoclonal type, expressing on the surface low levels of Ig
   E. Highlighting some modifications, such as del (17p)

53. **Stages of LLC based on the system introduced by Rai mean:** (398)
   A. Stage 0: lymphocytosis in blood and bone marrow, with absence of adenopathies and hepatosplenomegaly
   B. Stage 1: lymphocytosis and adenopathies
   C. Stage 2: lymphocytosis and anaemia
   D. Stage 3: lymphocytosis and spleno- or hepatomegaly
   E. Stage 4: lymphocytosis and thrombocytopenia

54. **Stages of LLC can be classified after, **EXCEPT**: (398)
   A. OMS
   B. Binet’s criteria
   C. The system elaborated by Rai
   D. Morphological classification of FAB
   E. Mutant/non-mutant status

55. **Regarding the syndrome Richter, the following statements are TRUE:** (399)
   A. It appears only in patients with the genetic phenotype ZAP-70
   B. It is a lymphoma with large cells, belonging to the same class of lymphocytes as LLC
   C. In some cases, the cells of the lymphoma belong to another cellular clone (it is a second neoplasia)
   D. As treatment, doctors use will schemes of poly chemotherapy used in the treatment of lymphomas, adapted to the histological subtype
   E. It is a special possibility of evolution of LLC

56. **In the case of LLC, the disease is more aggressive when:** (399)
   A. There are cases with non-mutant status of the genes \(IgV_H\)
   B. It is noticed the lack of marker ZAP-70
   C. It is noticed in the cytogenetic test: deletion 17p13
   D. It is noticed in the cytogenetic test: deletion 13q14
   E. It is noticed in the cytogenetic test: trisomy 12

57. **Which of the following statements are NOT true regarding the treatment of LLC?** (400)
   A. In stages A (0,1) and B (2) it is indicated to start an active treatment, immediately after setting a diagnostic
   B. Purine analogies represent the first line treatment
   C. Scheme R-FC can be used, with high rate of responses
   D. Obinutuzumab (anti CD52), in combination with chlorambucil, has therapeutic results and tolerability much superior to rituximab
   E. Ibrutinib is inhibitor of Bruton kinase and it is well tolerated, useful in aged patients

58. **The complete therapeutic response in LLC can be evaluated as such:** (403)
A. Hemoglobin >2 g/dl compared with the basic values
B. Dimensions under 1 cm of all the lymph nodes
C. Platelets >100,000/mm³
D. Leukocytes >1500/mm³
E. Hypercellular bone marrow with >30% lymphocyte

59. The partial therapeutic response in LLC can be evaluated as such: (403)
   A. Decrease with at least 50% of the lymph nodes, spleen and liver
   B. Lack of general symptoms
   C. Platelets > 100,000/mm³ or with increase >50% compared with the basic values
   D. Any value of the leukocytes
   E. Bone marrow with < 30% lymphocyte

60. Differential diagnostic of LLC can be made with: (398)
   A. Lymphocytosis secondary to infections (reactive)
   B. Spleen lymphoma with villous cells
   C. Essential thrombocytopenia (TE) and polycythemia vera (PV)
   D. Follicular lymphoma with leukemia discharge
   E. Leukemia with hairy cells

61. Which of the following signs are known with the name of symptoms B? (407)
   A. Adenopathy
   B. Fever
   C. Weight loss more than 10% of the initial weight during the last 3 months
   D. Transpiration
   E. Splenomegaly

62. Regarding the cells Reed-Sternberg (CRS) and Hodkin (CH), we can say the following: (407)
   A. CH is a typical malign cell in LH
   B. CRS is the one-nucleus variant of CH
   C. They are surrounded by a benign reactive population formed of lymphocyte T and B, neutrophilic and eosinophilic granulocytes, monocytes — “granuloma Hodkin”
   D. In the subtype of LH nodular with lymphoma predominance, CRS have an atypical aspect with one-lobe nucleus (“popcorn” cells)
   E. CH is a gigantic cell, usually bi-nucleus, with prominent nucleoli, intensely basophil (“owl head”)

63. Regarding the LH (lymphoma Hodkin) classical, we CANNOT say the following: (408)
   A. It is formed of 4 subtypes
   B. LH SN (nodular sclerosis) is the most frequent subtype of LH
   C. LH BL (rich in lymphocyte) has an unfavourable prognostic
   D. In LH DL (lymphocyte depletion) we meet an increased number of CRS and CH
   E. LH CM (mixed cells) has a favourable prognostic

64. Factors of negative prognostic in LH are: (410)
   A. age ≥ 40 years
   B. VSH > 50 mm/hour
   C. Presence of general signs B in stage I
   D. Tumour mass “bulky”
E. More than 3 affected ganglion areas

65. **Which of the following statements regarding the paraclinic explorations done in LH are TRUE?** (408)
   A. Surgery ganglion biopsy is the diagnostic investigation of election
   B. Bone and marrow biopsy is the exploration of election to set the degree of extension of the disease
   C. The immunohistochemical test is essential to confirm the immunophenotype of the malign cells
   D. VSH can be normal/increased and signifies a favourable prognostic
   E. The method of election to appreciate the response to treatment is the PET-CT test

66. **Regarding the system of stages Ann Arbor, which of the following statements are FALSE?** (409)
   A. It is currently used in LNH
   B. Stage I: it is interested only one single lymphatic area
   C. Stage II: two or more lymphatic areas are interested, on both sides of the diaphragm
   D. Stage III: two or more lymphatic areas are interested, on the same side of the diaphragm
   E. Stage IV: diffuse affection of a non-lymphatic organ

67. **Treatment of first line, in a patient with classical LH, stage II favourable, is done with:** (411)
   A. Scheme BEACOPP
   B. Radiotherapy (RT)
   C. Scheme DHAP
   D. Scheme ABVD
   E. Scheme IGEV

68. **Which of the following chemotherapies belong to the scheme of Care poly chemotherapy DHAP used in LH?** (413)
   A. Doxorubicin
   B. Cisplatin
   C. Cytosine arabinoside
   D. Dexamethasone
   E. Procarbazine

69. **Among the secondary effects on the long term of chemotherapy and radiotherapy LH there is NOT:** (413)
   A. Hyperthyroidism
   B. Pulmonary fibrosis
   C. Lung carcinoma (common)
   D. Hypogonadism
   E. Bone complications: osteoporosis

70. **Regarding the clinic manifestations found in LNH we can say, EXCEPT:** (415)
   A. From the clinical point of view, two groups are described: LNH indolent and LNH aggressive
   B. Ganglion regions interested are usually near
   C. Splenomegaly and hepatomegaly are relatively frequent at the beginning or during the evolution
   D. Neurological signs appear in the case of cerebral primary LNH
   E. General signs B are often present especially in indolent LNH, and in case of aggressive LNH the appearance of symptoms B can signify “disease acceleration”
71. **Which of the following statements regarding survival and healing of patients with LNH are TRUE?** (419)
   A. LNH aggressive have a favourable natural evolution, rarely treatable
   B. LNH indolent have an evolution, but have a chance of healing of 30-70%
   C. The global survival at 5 years is higher in LNH indolent (70-80%)
   D. The global survival at 5 years is more reduced in LNH aggressive (30-70%)
   E. In case LNH aggressive, patients alive at 5 years are those who responded to the treatment and are potentially healed

72. **The clinical classification of LNH comprises the following “clinical” groups, EXCEPT:** (417)
   A. LNH indolent
   B. LNH aggressive
   C. LNH with high risk
   D. LNH with low risk
   E. LNH very aggressive

73. **Which of the following parameters are considered factors of prognostic IPI (International Prognostic Index), used in case of aggressive LNH?** (418)
   A. Age >60 years
   B. Stages Ann-Arbor III and IV
   C. Interest in 5 lymphatic areas
   D. Index of performance 2
   E. Lactate dehydrogenase (LDH) increased

74. **Among the oncogenes with mutations are found in certain subtypes LNH are the following:** (415)
   A. Oncogene c-MYC
   B. Oncogene BCL-2 (B-cell lymphoma 2)
   C. Gene BCL-1/cyclin D1
   D. Gene ALK
   E. Gene BCR-ABL

75. **Treatment of first line used in case LNH of line B indolent is:** (420)
   A. Scheme R-CVP
   B. Scheme R-CHOP
   C. Scheme R-DHAP
   D. Rituximab, cyclophosphamide, vincristine, PDN
   E. Rituximab, dexamethasone, cytarabine, cisplatin

76. **Treatment of line 2 (or of “saving”) used in case of relapse LNH aggressive is NOT:** (420)
   A. Scheme HyperCVAD
   B. Scheme R-CHOP
   C. Scheme R-DHAP
   D. Rituximab, cyclophosphamide, doxorubicin, vincristine, PDN
   E. Rituximab, dexamethasone, cytarabine, cisplatin

77. **Scheme of chemotherapy R-CVP treatment of first line in LNH comprises:** (421)
   A. Cisplatin
VI. ENDOCRINOLOGY

**Complement simple:**

1. **Which of the following represents transitory thyrotoxicosis:** (425)
   - A. Graves disease
   - B. Quervain thyroiditis
   - C. Functional metastatic thyroid carcinoma
   - D. Toxic multi-node goitre
   - E. Toxic adenoma

2. **Which of the following mechanisms are NOT involved in the pathology of ophthalmopathy in Graves disease:** (426)
   - A. Activation and proliferation of ocular fibroblasts
   - B. Increase of retro-orbital fat
   - C. Dis-insertion of intrinsic muscles of eye balls
   - D. Infiltration with glycosaminoglycans of the muscular tissue
   - E. In the progression of the disease, inflammation decreases and muscles become fibrosis

3. **Which of the following statements regarding the thyrotoxicosis amiodarone of type I is TRUE:** (434)
   - A. It is a destructive thyroiditis with inflammatory character
   - B. Treatment consists in administration of methimazole
   - C. In the ultrasound Doppler exam a diminished circulation is noticed
   - D. Thyroid hormones appear, pre-formed from affected thyroid follicular cells
   - E. Treatment consists in administration of glucocorticoids and methimazole

4. **Syndrome Schmidt is formed of the following:** (439)
   - A. Rheumatoid arthritis and autoimmune hypothyroidism
   - B. Autoimmune Addison disease and diabetes mellitus type 2
   - C. Autoimmune hypothyroidism and vitiligo
   - D. Autoimmune hypothyroidism and myasthenia gravis
   - E. Autoimmune Addison disease and autoimmune hypothyroidism

5. **Which of the following formulas of milk will be avoided congenital hypothyroidism:** (444)
   - A. Formulas of extensively hydrolyzate milk
   - B. Formulas of milk based on amino acids
   - C. Formulas of milk that contain soy
   - D. Formulas of milk anti-reflux gastroesophageal
   - E. Formulas of hypoallergenic milk

6. **Which of the following additional paraclinic explorations are NOT indicated of congenital hypothyroidism:** (443)
A. Dosing thyroglobulin
B. Thyroid scintigraphy with Technetium 99 m
C. Thyroid ultrasound
D. Thyroid scintigraphy with $^{131}$I
E. Thyroid scintigraphy with $^{123}$I

7. Which of the following factors of risk is NOT specific to thyroid cancer: (446)
   A. History of irradiation at head and neck level
   B. Feminine sex
   C. Lateral and cervical adenopathy
   D. History of heredocolateral of MEN 2
   E. Presence of dysphonia, dysphagia and cough

8. Which of the following statements regarding the syndrome MEN2B is NOT true: (453)
   A. Thyroid marrow cancer is more aggressive in MEN2B than in MEN2A
   B. It is formed of thyroid marrow cancer, pheochromocytoma and primary hyperparathyroidism
   C. It is formed of thyroid marrow cancer, pheochromocytoma, ganglioneuroms
   D. It does not include parathyroid disease
   E. It associates phenotype marfanoid

Complement multiple:

9. Which of the following statements regarding the toxic adenoma are TRUE: (433)
   A. The hyperfunction of the contralateral lobe appears
   B. Endogenous secretion of TSH is suppressed
   C. It associates bilateral opthamopathy
   D. Thyroid ultrasound shows a solid node, non-vascularized with diameter under 3 cm
   E. In most cases, there are benign follicular adenomas

10. Which of the statements regarding the use of $\beta$-blocking in thyrotoxicosis are true: (429-434)
    A. Propanolol administered at 6-8 hours inhibits the peripheral conversion of T4 at T3
    B. Propanolol is counter-indicated in patients with congestive heart failure
    C. In thyrotoxicosis crisis it is possible to give intravenous $\beta$-blocking of short-term action
    D. $\beta$-blocking with long duration of action are counter-indicated
    E. It is used in thyrotoxicosis amiodarone induced type II

11. Which of the following are hyperthyroidism characterized by TSH suppressed and increased radio immune capture: (425)
    A. Familial non-autoimmune hyperthyroidism
    B. Iatrogenic thyrotoxicosis
    C. Toxic multi-node goitre
    D. Acute infectious thyroiditis
    E. Sub-acute viral thyroiditis

A. Sub-acute thyroiditis differs from Graves disease by the following: (434)
   Radio immune capture is very low in sub-acute thyroiditis
   B. Thyroid can be increased by volume
   C. Auto-antibodies anti-thyroid are not commonly present in sub-acute thyroiditis
D. Hypoechogetic can be found at ultrasound
E. TSH is inhibited

12. Treatment by the method “Block and replace” in hyper thyroid is characterised by: (430)
A. An initial stage of administration of propylthiouracil for a period of 3-6 months
B. Initial administration of methimazole 3-6 months after reaching euthyroid
C. After 3-6 months methimazole is cancelled and levothyroxine is administered
D. Treatment is not recommended for most patients because it has a higher degree of appearance of side effects
E. After the initial stage, methimazole and levothyroxine will be administered at the same time

13. Toxic poly-node goitre is characterised by the following, EXCEPT: (433)
A. Hyperthyroid can be precipitated by the administration of propylthiouracil
B. Scintigraphy describes multiple nodes with different degrees of capture
C. It appears mainly in young patients
D. Lab tests underline high values of T4 and normal values of T3
E. Poly-node goitre can have various dimensions with retrosternal extension

14. Class 3 in the classification of the ocular modifications in the Graves disease is NOT characterised by: (427)
A. Sight loss by optical nerve disease
B. Infiltration and fibrosis of extraocular muscles
C. Proptosis
D. Cornea injuries of keratitis type
E. Conjunctival hyperemia correct A and D

15. Secondary hypothyroidism is characterised by the following hormonal values: (437)
A. TSH <0.5mUI/L and FT4 low
B. TSH >4.5mUI/L and FT4 low
C. TSH between 4.5-10mUI/L and FT4 low
D. TSH >4.5mUI/L and FT4 increased
E. TSH inadequate normal between 0.5-4.5mUI/L and FT4 low

16. In the anatomic and pathologic exam in auto-immune thyroid Hashimoto we do NOT find the following (438)
A. Lymphoplasmacytic infiltrate
B. Formation of germ centres
C. Hypertrophy of thyroid follicles
D. Oxiphil metaplasia
E. Colloid present in normal quantities

17. Frilozyt is a symptom that appears in: (435)
A. Hyper-thyroid poly-node goitre
B. Hashimoto thyroiditis
C. Quervain thyroiditis
D. Riedl thyroiditis
E. Graves disease
18. **Which of the following statements regarding the administration of liothyronine are TRUE:** (441)
   A. It is never administered at the same time with levothyroxine
   B. It can be administered intravenous or via nose-gastric probe
   C. It is administered in myxedema coma without response to levothyroxine within 24 hours
   D. It is administered only intravenous
   E. It is indicated usually in young patients, without history in coronary artery disease

19. **Which of the following are NOT causes of primary hypothyroidism:** (435)
   A. Hashimoto thyroiditis
   B. Pituitary thyroiditis
   C. Riedl thyroiditis
   D. Infiltrative hypothalamus disease
   E. Absence of thyroid

20. **Which of the following clinical signs are NOT specific to hypothyroidism in adult:** (436)
   A. Facies infiltrated extremities
   B. Carotenodermy limited at the level of facies
   C. Syndrome of carpal tunnel
   D. Scarcity of inner third of eyebrows
   E. HTA diastolic

21. **Clinical signs present in congenital hypothyroidism in a new-born are the following, EXCEPT:** (442)
   A. Extended jaundice
   B. MacroGLOSSIA
   C. Muscular hypertonia
   D. Reduced weight at birth
   E. Anterior fontanelle of increased dimensions

22. **In a patient with diagnostic of hypothyroidism, we can identify during the paraclinical tests:** (437)
   A. Moderate hyperprolactinemia in severe primary hypothyroidism
   B. Creatinine within normal limits
   C. Blocking antibodies of the receptor of TSH increased in 90% of the cases in Hashimoto thyroiditis
   D. Antibodies anti-tireoperoxidase grown in Hashimoto thyroiditis
   E. Complex QRS hypo-vaulted at ECG

23. **Which of the following statements regarding the thyroid marrow cancer are TRUE:** (452)
   A. It derives from follicular cells
   B. A secretion of carcinoembryonic antigen appears
   C. It represents 80% of all the forms of thyroid cancer
   D. It is accompanied by values of low calcitonin
   E. It can be accompanied by cushingoid syndrome

24. **Which of the following carcinomas are of follicular type:** (446)
   A. Anaplastic cancer with small cells
   B. Carcinoma with clear cells
C. Marrow cancer
D. Insular carcinoma
E. Carcinoma with Hurtle cells

25. **Thyroid oncogenesis is characterised by the following statements**: (449)
   A. Initiator factors of oncogenesis stimulate the cell proliferation
   B. Thyroid carcinoma are of monoclonal type
   C. Factors that promote oncogenesis are represented by chemical substances or processes of irradiation
   D. TSH is a promoter factor
   E. For the appearance of the oncogenetic process, it is necessary to activate some proto-oncogenes

26. **Pemberton sign is characterised by**: (447)
   A. It appears when the patient raises their arms above the head
   B. It manifests clinically by the appearance of the facial plethora
   C. It is due to the obstruction the external jugular veins
   D. It is due to the haemorrhage appeared in an adenoma
   E. It appears as a consequence of the development of goitre toward the anterior mediastinum

27. **Which of the following statements regarding the thyroid marrow cancer is NOT true**: (453)
   A. The positive diagnostic forces to total thyroidectomy
   B. For injuries <1 cm the ganglion dissection can be limited to the central compartment
   C. In syndrome MEN2B, it is accompanied by the parathyroid affection
   D. Chemotherapy based on oncologic cytotoxic medication has brought important benefits
   E. Post-surgery, it is necessary the substitution therapy with levothyroxine

28. **Which of the following do NOT belong to the group of inhibitors of tyrosine kinase**: (453)
   A. Streptozotocin
   B. Cabozantinib
   C. Vandetanib
   D. Dacarbazine
   E. Sorafenib

29. **Therapeutic options in thyroid marrow cancer are**: (453)
   A. Total thyroidectomy and ganglion dissection
   B. Therapy of radioiodoablation
   C. In case of injuries < 1 cm the ganglion dissection can be limited to the central compartment
   D. Chemotherapy based on inhibitors of tyrosine –kinase
   E. Post-surgery thyroid substitution with the intention of suppression

30. **Which of the following thyroid tumours represent in the cytological reports “grey areas”**: (449)
   A. Follicular carcinomas
   B. Carcinoma with clear cells
   C. Carcinomas with Hurtle cells
   D. Insular carcinoma
   E. Suggestive elements for papillary carcinoma, but not diagnostic for papillary carcinoma
VII. INFECTIOUS DISEASES

Complement simple:

1. **Regarding the acute viral hepatitis, the following statements are true, EXCEPT:** (455-460) U
   A. VHA and VHE are transmitted by excrements and orally
   B. VHB can be transmitted by consumption of drugs with intra-venous administration
   C. VHC can be transmitted by consumption of drugs with intra-venous or intra-nose administration
   D. Transmission of VHC sexually is frequent
   E. VHD can be responsible for a supra-infection in patients with VHB

2. **Which of the following statements regarding the paraclinical tests in acute viral hepatitis with VHA is NOT true?** (456) M
   A. Aminotransferases are in general grown 10 times more than the superior limit of the normal
   B. Among the aminotransferases, ALT is more specific for the hepatic tissue
   C. Concentration of prothrombin is under 25 % in fulminant form
   D. IgG VHA means recent contact
   E. Hyperbilirubinaemia

3. **About HIV we can say the following, EXCEPT:** (463) U
   A. It is part of the family of retroviruses
   B. The source of infection is human
   C. Its genome is of DNA type
   D. It sets viral reservoirs in the human body, where it remains in latent state on long term
   E. In the virus replication, 3 viral enzymes interfere

4. **Regarding the clinical manifestations of the HIV infection, the following statements are NOT true:** (464) G
   A. HIV infection is classified according to the CDC system
   B. The asymptomatic stage has an average duration of 8-10 years, the number of lymphocytes CD4 remains relatively stable, and the viral charge (ARN HIV) decreases gradually
   C. AIDS stage is defined by the decrease of the number of cells CD4 under 200/mmc
   D. In the symptomatic stage appear the symptoms of the pathologies associated to the HIV infection
   E. In the acute infection, the serum window can last up to 6 months

Complement multiple:

5. **Select the TRUE statements regarding the VHB:** (457) M
   A. It is a virus of DNA type
   B. It does not have risk of infection reactivation
   C. In case of infection in the adult period, most cases will evolve into chronic hepatitis
   D. They integrate the genetic material in the host-cell by means of the forms of DNAcc
   E. In case of VHB infection in childhood, it is registered spontaneous clearance within 6 months from the moment of the acute infection
6. **Suggestive serum for acute infection with VHB is:** (458) M
   A. AgHBs negative
   B. AgHBs positive
   C. AcHBs negative
   D. AcHBc of IgM positive type
   E. AcHBc of IgG positive type

7. **Regarding the VHD, the following are true, EXCEPT:** (459) U
   A. It is a virus of DNA type with its own cover
   B. It is a virus of DNA type without own cover
   C. It becomes chronic more frequently in the case of over-infection than in the case of co-infection
   D. It is a virus of ARN type, defective, without own cover
   E. It becomes chronic more frequently in the case co-infection than in the case of over-infection

8. **Select the TRUE statements regarding the acute hepatitis with VHE:** (456) M
   A. VHE can be transmitted by excrements and orally
   B. It evolved frequently to chronic hepatitis
   C. For the etiologic diagnostic AcVHE is determined
   D. Fulminant cases were reported in patients affected or pregnant women
   E. VHE is a DNA virus that causes acute hepatitis with auto-limitative evolution

9. **Which of the following statements regarding the prevention of vertical transmission with VHB NU are true?** (457) G
   A. It is important to monitor viremia during pregnancy
   B. It is indicated the antiviral treatment or lamivudine in case viremie is more than 200 UI/ml in the second trimester of pregnancy
   C. Birth will be done by caesarean
   D. It is indicated the antiviral treatment or lamivudine in case viremie is more than 2000 UI/ml in the third trimester of pregnancy
   E. The newborn will receive specific human anti-VHB, in the first weeks after birth

10. **Hepatitis C can present fulminant forms CU:** (461) M
    A. Prognostic reserved (concentration of prothrombin under 25%)
    B. Prognostic reserved (concentration of prothrombin over 25%)
    C. Coagulopathy
    D. Hemorrhagic syndrome
    E. Hepatic encephalopathy

11. **These are hepatic viruses with genome type ARN:** (455-460) U
    A. VHA
    B. VHB
    C. VHC
    D. VHD
    E. VHE

12. **The main ways of transmission of the infection HIV are, EXCEPT:** (463) U
    A. unprotected sexual contact
B. Via excrements or orally (with “dirty hands”)
C. Parenteral transmission
D. Vertical transmission
E. By Flügge drops

13. In HIV replication, the following viral enzymes interfere: (463) U
A. Oxidoreductase
B. Ligase
C. Integrase
D. Protease
E. Reverse transcriptase

14. Among the opportunist infections appeared in HIV infection with CD4<200/mmc we do NOT find: (466) M
A. Pulmonary toxoplasmosis
B. Cryptococcal meningitis
C. Pulmonary pneumocystosis
D. EBV retinitis
E. Atypical mycobacteriosis disseminated

15. Regarding the diagnostic in HIV infection, the following are TRUE: (465) M
A. It is used a screening test and a test of confirmation, followed by psychological counselling
B. It is used at the beginning the test Western blot
C. Tests ELISA and Western blot can be negative more than 12 months
D. If ELISA is positive, the test Western blot of confirmation is done
E. If ELISA is negative, it can be done either viral charge or the test ELISA is repeated after 6 months.

16. A patient C3, conform to the classification CDC of HIV infection, can present: (464) G
A. Tuberculosis
B. Persistent generalized lymphadenopathy
C. Sarcoma Kaposi
D. CD4 nadir < 200 cells/mmc
E. CD4 nadir 200-499 cells /mmc

17. Scheme of treatment in HIV infection can be re-evaluated in case of: (467) M
A. Virologic failure
B. Immunity failure (growth of CD4 under treatment)
C. Consideration of medicine toxicity
D. Tolerability
E. Profile of adverse reactions(lipodystrophy)

18. Definition of sepsis (2014) supposes: (469) U
A. Infection
B. Inflammation
C. Syndrome of systemic inflammatory response (SIRS)
D. Dysfunction of organ (with different localization apart from the primary location of the infection)
19. The “4D” of antimicrobial therapy in the sepsis can take into account the following, EXCEPT: (470)
   U
   A. Right Dose
   B. Right Drug
   C. De-escalation
   D. Right Distribution
   E. Right PharmacoDynamy

20. Regarding the complications that can appear in the sepsis the following are true, EXCEPT: (470) G
   A. The syndrome of acute respiratory distress can appear
   B. Increase of fraction of cardiac ejection
   C. Absence of proteinuria and nitrogen retention
   D. Metabolic imbalance of hypo glycaemia type, alkalosis
   E. Coagulopathy
   F. 

21. Which of the following criteria defines SIRS? (469) M
   A. Leucocytosis or leukopenia
   B. Fever or hypothermia
   C. Oligo-anuria
   D. Decrease of TA systolic ≤90 mmHg
   E. Tachycardia (ventricular allure >90/min)

VIII. NEPHROLOGY

Complement simple:

1. Which of the following medicine needs the reduction of the doses only when eRFG decreases under 30mL/min: (503) M
   A. Tetracycline
   B. Methotrexate
   C. Flucytosine
   D. Beta-blockers
   E. Aminoglycosides

2. Regarding the digestive complications in the chronic disease of kidney the following are NOT true: (497) U
   A. The most frequent cause of lower digestive bleeding is cancer
   B. Duodenal ulcers, gastritis and erosive duodenitis appear more frequently in patients in predialysis than in those with dialysis
   C. Mesenteric ischemia is a severe complication in patients with dialysis and it appears most frequently because of the injuries of atherosclerosis
   D. Administration of sulphate polystyrene combined with sorbitol determines frequently the necrosis of the colon
   E. Increase of urea concentration in the digestive secretions determines nausea and vomit
3. **Regarding the cardiovascular complications in the chronic disease of kidney it is TRUE that:** (495) 
   M
   A. The main causes of mortality are the myocardial infarction and the vascular cerebral accidents
   B. Initially, the systolic cardiac failure is produced, which generates episodes of repetitive acute pulmonary oedema
   C. The number of images in “comet tail” at lung ultrasound is a better predictor of mortality than the evaluation of the hyper hydration by bio-impedance.
   D. The level of natriuretic peptides has an important role in the diagnostic of the episodes of acute heart failure in patients with BCR
   E. Acute pericarditis appears in patients in stage G3b and has frequently a strong hemodynamic influence

4. **Regarding the atherosclerosis of the lower limbs in the chronic disease of kidney, it is NOT true:** (494) U
   A. Index ankle-arm under 0.9 suggests arterial obstruction
   B. Index toe-arm under 0.7 suggests arterial obstruction
   C. Index ankle - arm over 1.3 suggests extensive calcification of arteries in lower limbs and can mask the obstruction
   D. Index ankle- arm under 1.3 suggests extensive calcification of arteries in lower limbs and can mask the obstruction
   E. Angiography is recommended only when revascularization is intended

5. **Regarding the serum phosphate chelators, it is NOT true:** (490-492) M
   A. The calcium salts reduce phosphatemia but cannot turn positive the calcium balance
   B. Sevelamer is an efficient chelator non-calcic that can reduce the LDL-cholesterol as well
   C. Can be used lanthanum, too
   D. Can be used niacin
   E. Can be used cinacalcet, too

6. **Regarding the troubles of hydro-electrolytic and acid-basic metabolism in the chronic disease of kidney, it is NOT true:** (486) M
   A. Acidosis is the most frequent acid-basic trouble
   B. A retention of Na⁺is produced
   C. A hyper hydration is produced
   D. Hyperkalemia appears more frequently when eRFG decreases under 10-15ml/min
   E. When serum potassium is between 5.5-6.5 mEq/l it is recommended a diet rich in alkaline valences and the elimination of medicine causes

7. **Which of the following is NOT a cause of resistance in the treatment of oedemas:** (486-487) U
   A. Big intake of salt
   B. Diet rich in alkaline valences
   C. Nephrotic proteinuria
   D. Heart failure
   E. Hypovolaemia

8. **Regarding the progression BCR it is NOT true:** (480-481) G
   A. A decline of eRFG of 1ml/min per year is “physiological” in people over 50 years old
B. Reduction by less than 1-5% of eRFG per year is “physiological” in people over 50 years old
C. Passing to a superior stage associated with the decrease by more than 25% compared with the initial value of eRFG is considered accelerated progression
D. Rapid progression is considered the decrease of eRFG with more than 5ml/min per year
E. For the evaluation of the progression BCR, 3 determinations are necessary in an interval of 12-24 months

9. **Classification of chronic disease of kidney does NOT include:** (477) U
   A. Stage G3b with eRFG: 30-44 ml/min/1.73 m²
   B. Stage G2 with eRFG: 60-89 ml/min/1.73 m² + pathologic summary or proteinuria over 150mg/day
   C. Stage G4 with eRFG: 15-29 ml/min/1.73 m²
   D. Stage G5 with eRFG: sub 15 ml/min/1.73 m²
   E. Stage G3a with eRFG: 30-44 ml/min/1.73 m²

10. **Regarding the categories of risk in BCR according to albuminuria it is NOT true:** (476) M
    A. A1 includes 1+ in urinary strip
    B. A2 includes a proteinuria comprised between 150-500 mg/24 hours
    C. A1 includes a ratio albumin/creatinine under 30 mg/g
    D. A3 includes a ratio proteins/creatinine over 50mg/g
    E. A3 includes a albuminuria over 300mg/24 ore

11. **Which of the following statements regarding the glomerulonephritis membranoproliferative it is NOT true:** (546) G
    A. In type I appears frequently the aspect of “compartments” of the glomeruli
    B. In type II appear electron-dense deposits with aspect of band in basal membrane glomerular
    C. In type I decreases the fraction C3 and C4
    D. In type III decreases only the fraction C4
    E. In type II decreases only the fraction C3

12. **Regarding the treatment of membranous glomerulopathy it is NOT true:** (544) G
    A. In patients with low risk it is indicated the treatment with IECA or ARBs and periodic monitoring
    B. In patients with high risk it is recommended the association of cyclophosphamide with PDN
    C. Rituximab is suggested for refractory forms
    D. In patients with constant creatinine over 3.5 mg/dL and kidneys of small dimensions, it is recommended the aggressive immunosuppressive treatment
    E. If albuminemia is less than 2.5 g/dL, it should be carried out the prophylaxis of thromboembolic complications

13. **Which of the following glomerulopathies do NOT usually manifest by nephritic syndrome:** (543) U
    A. Acute post streptococcus glomerulonephritis
    B. Nephropathy IgA
    C. Rapid progressive glomerulonephritis
    D. Membranous glomerulopathy
    E. Syndrome Goodpasture
14. **Which of the following is NOT a clinic manifestation of glomerulopathies:** (521) U
   A. Proteinuria
   B. Hematuria
   C. Edemas
   D. Leucocyturia
   E. High blood pressure

15. **Which of the following medicine can determine glomerular disease:** (516) U
   A. Lithium
   B. Anticonvulsivant
   C. Penicillin G
   D. Cephalosporins generation III
   E. Beta blockers

16. **Which of the following is NOT an immune mechanism involved in the pathogenesis of glomerulonephritis:** (516) U
   A. ASCA
   B. Circulating immune complexes
   C. Complexes immune in situ
   D. ANCA
   E. Auto-antibodies against some glomerular intrinsic antigenes

17. **Which of the following statements regarding low ITU is NOT true:** (561-562) G
   A. Not treated, the gonococcal urethritis determines epididymitis, impotence and sterility in a man
   B. Urethritis with *Chlamydia* respond to ofloxacin
   C. Prostatodynia is the pelvic-kidney pain associated with urine probes and normal prostatic secretion
   D. 3-day therapy in acute uncomplicated cystitis is less efficient than the 7-day therapy
   E. In the scheme with 7-day duration, it can be used: nitrofurantoin, cotrimoxazole, amoxicillin+ clavulanic acid

18. **Which of the following statements regarding the aetiology of chronic pyelonephritis is NOT true:** (555) M
   A. The most frequent etiologic agent incriminated is *E.coli*
   B. Fungi can produce renal abscesses by hematogen fungus dissemination
   C. In the infections of catheter most frequently *S.aureus* is isolated
   D. In chronic complicated pyelonephritis *Klebsiella* is found frequently
   E. Infection with enterococcus is rare is persists several years

19. **In which of the following clinic circumstances there is no suspicion of acute complicated pyelonephritis:** (552) M
   A. First episode of PNA in man
   B. First PNA associated with renal colic and hematuria in woman
   C. First PNA with IRA and proteinuria in women
   D. First PNA with persistent leucocyturia in women
   E. First PNA with fever over 40°C and altered general state in woman
20. Which of the following is NOT considered tubulointerstitial nephropathy conform OMS: (549) U
A. Chronic pyelonephritis
B. Obstructive uropathy
C. Nephropathy of flux
D. NTI acute infectious associated to diphtheria
E. Berger disease

21. Classification RVU at cistoureterography does NOT include: (559) M
A. Degree II: slight dilatation of ureter and pelvis
B. Degree IV: moderate dilatation of ureter and pelvis
C. Degree V: important dilatation of ureter and pelvis
D. Degree I: only the ureter becomes opaque
E. Degree II: ureter and pelvis are moderately opaque

22. Which of the following statements regarding the tampon systems is NOT true: (566) U
A. The main tampon system is the system a.carbonic/bicarbonate
B. Concentration $H^+$ in tampon solution is: $H^+=[HCO_3^-]/[H_2CO_3]$
C. Concentration $H^+$ in tampon solution is: $H^+=[H_2CO_3]/[HCO_3^-]$
D. $[H_2PO_4^-]/[HPO_4^{2-}]$ is another tampon system
E. $[H^+Protein]/[Protein^-]$ is another tampon system

23. Which of the following statements regarding the normal values of the parameters ASTRUP is NOT true: (567) U
A. $pCO_2= 40$ mmHg
B. pH standard= 7.35-7.45
C. normal tampon bases = 40-50 mEq/l
D. $CO_2$ total= 24-27 mEq/l
E. pH actual= 7.30-7.40

24. Which of the following statements regarding the acid-basic balance is TRUE: (570) M
A. respiratory acidosis: pH<7.35, pCO_2 low, HCO_3^- normal
B. metabolic alkalosis: pH>7.45, pCO_2 low, HCO_3^- low
C. Respiratory alkalosis: pH>7.45, pCO_2 low, HCO_3^- normal
D. Metabolic acidosis: pH<7.45, pCO_2 normal, HCO_3^- low
E. Metabolic acidosis: pH<7.35, pCO_2 high, HCO_3^- high

25. Indications for the administration of bicarbonate in metabolic acidosis do NOT include: (573) M
A. Severe respiratory acidosis - pH: 7.15-7.20
B. Severe hyperkalaemia
C. Metabolic acidosis with anionic normal gap by urine loss of bicarbonate
D. Intoxication with barbiturates
E. Salicylic intoxication

26. Which of the following is NOT indication of hemodialysis: (588) M
A. hyperkalaemia associated with chronic kidney failure
B. hyperkalaemia associated with acute oliguric kidney failure
C. hyperkalaemia associated with significant tissue injuries
D. hyperkalaemia associated with acute polyurea kidney failure
E. hyperkalaemia resistant to medical treatment

27. **Regarding the daily losses estimated, the following is NOT true:** (577) G
   A. During the physical effort by transpiration 5 litres of liquid can be lost
   B. The liquid loss by excrements are 100 mL regardless of temperature of physical effort
   C. The biggest loss of liquids at normal temperature is done by transpiration
   D. Insensitive losses are represented by skin and respiration
   E. Urine losses decrease at high temperatures compared with the normal temperature

**Complement multiple:**

28. **Aetiology of hyperosmolar hypovolemia does NOT include:** (579) M
   A. Syndrome Schwartz-Bartter (hypo secretion ADH)
   B. Traumatisms of skull and cervical
   C. Digestive loss by vomit
   D. Hepatic cirrhosis
   E. Iatrogenic administration of glucose serum 5%

29. **Which of the following is NOT a trouble of composition of the hydroelectrolitic balance:** (577) U
   A. Hyperkalemia
   B. Hyponatremia
   C. Hypokalemia
   D. Hyperphosphataemia
   E. Hypovolaemia

30. **The following statements regarding the indicators of the kidney injuries are TRUE:** (475) M
   A. Syndrome Bartter includes aminoaciduria, glycosuria and tubular acidosis
   B. Hematite cylinders appear in proliferative glomerulonephritis
   C. Leukocyte cylinders appear in pyelonephritis
   D. Renal tubular acidosis is characterised by systemic acidosis with alkaline urine
   E. Diabetes insipidus includes polyuria and polydipsia normoglycemia

31. **Criteria of diagnostic in BCR include:** (473) U
   A. Albuminuria over 30mg/day
   B. Albuminuria over 300mg/day
   C. Acid-basic anomalies due to the dysfunction of the renal tubes
   D. Renal transplant
   E. eRFG under 60 ml/min/1.73 m²

32. **severe decompressed acidosis is characterised by the following:** (487) U
   A. pH sub 7.2
   B. pH sub 7.35
   C. bicarbonate under 20 mEq/l
   D. hyper ventilation
   E. hyperkalemia
33. **Which of the following are complications of the uremia associated with secondary hyperparathyroidism:** (489) U
   A. calcifications of large vessels
   B. calciphylaxy
   C. polyneuropathy
   D. liver disease
   E. Pericarditis

34. **For the uremic pruritus, the following can participate:** (500) M
   A. Atherosclerosis
   B. Modified perspiratory secretion
   C. Increase of the concentration of phosphates in derma following the secondary hyperparathyroidism
   D. Syndrome of malnutrition
   E. Anomalies of arborisation of the cutaneous nerve thread type C

35. **The modifications of life style in BCR comprise:** (482) G
   A. Total interdiction of the salt intake
   B. Energetic contribution of 50 kcal/kg/day
   C. Protein contribution of 0.6-0.7 g/kg/day for eRFG over 30mL/min
   D. Maintaining an index of body mass between 20-25 kg/m²
   E. Quit smoking

36. **Which of the following clinic manifestations correspond to stage G3b al BCR:** (477) U
   A. Pericarditis
   B. Malnutrition
   C. Hyperkalemia
   D. Acidosis
   E. Nitrogen retention

37. **Which of the following clinic manifestations do NOT correspond to stage G4:** (477-478) U
   A. Encephalopathy
   B. Polyneuropathy
   C. Uremic gastroenteritis
   D. Malnutrition
   E. HVS

38. **Which of the following diseases are major risk factors for BCR:** (479) U
   A. Diabetes mellitus
   B. HTA
   C. Amyloidosis
   D. Systemic infections
   E. Hepatic cirrhosis

39. **Regarding the treatment of uremic pruritus, the following are TRUE:** (500) M
   A. Topic treatment is the first and main therapeutic measure indicated
   B. General body treatment with UV rays with large band improves permanently the pruritus
C. The activated coal is recommended in severe pruritus
D. Thalidomide is recommended in severe pruritus
E. The control of hyperparathyroidism and optimisation of treatment by dialysis represent the first recommended measures

40. **Skin complications in BCR are: (500-501) U**
   A. Terry nail arc
   B. Xerotic
   C. Nephrogenic fibrosing dermopatia
   D. Calciphylaxy
   E. Janeway injuries

41. **Which of the following categories of risk according to albuminuria and eRFG require monitoring every 4 months: (479) M**
   A. Patients with eRFG between 29-15 ml/min and albuminuria between 30-299 mg/g
   B. Patients with eRFG between 30-44 ml/min and albuminuria between 30-299 mg/g
   C. Patients with eRFG under 15 ml/min and albuminuria sub 30 mg/g
   D. Patients with eRFG between 29-15 ml/min and albuminuria over 300 mg/g
   E. Patients with eRFG between 45-59 ml/min and albuminuria over 300 mg/g

42. **Which of the following categories of patients have medium risk in BCR: (479) U**
   A. Stage G3b and albuminuria A2
   B. Stage G2 and albuminuria A3
   C. Stage G4 and albuminuria A1
   D. Stage G3a and albuminuria A2
   E. Stage G3b and albuminuria A3

43. **Which of the following statements regarding the category of albuminuria is NOT TRUE: (476) U**
   A. A1 includes an albuminuria on 24 hours under 300 mg/24 hours
   B. A2 includes a ratio albumin/creatinine under 30 mg/g
   C. A3 includes albuminuria over 300 mg/24 hours
   D. A1 includes a ratio albumin/creatinine under 30 mg/g
   E. A2 includes albuminuria between 30-300 mg/24 hours

44. **Regarding the rate of glomerular filtrate, the following statements are NOT TRUE: (476-477) M**
   A. Clearance of insulin is the “golden standard” to determine directly the RFG and it is very used in the medical practice
   B. Dosing creatinine has an analytical imprecision, because a large part is eliminated by tubular secretion
   C. Estimation of filtration is recommended and it is calculated by using the formula CKD EPI 2012
   D. Estimation of filtration rate is recommended and it is calculated by using the formula MDRD
   E. Estimation of RFG based on cystatin C is recommended when the glomerular filtration has border values at the estimation only on serum cretine and there are no indicators of kidney injury

45. **Which of the following statements regarding the IECA in BCR are TRUE: (484) G**
   A. They are recommended as anti-high blood pressure of first intention when albuminuria is over 300mg/g creatinine even when PA is normal
B. There are no major differences between IECA and blockers of the receptors of angiotensin
C. They determine the vasodilatation of the afferent arteriole and the vasoconstriction of the
afferent arteriole, thus increasing the blood flow at the level of the glomerulus
D. During the first days of treatment, diuresis, creatinine and potassium must be monitored
E. Combination Aliskiren and IECA decreases the proteinuria and it is recommended when eRFG
decreases under 60 ml/min

46. **Regarding the control of the arterial pressure and the proteinuria in BCR, the following are
   TRUE:** (484-485) M
   A. Statins are indicated for the patients with hypercholesterolaemia and age under 50
   B. Fibrates can be recommended to patients with diabetic nephropathy and hypercholesterolaemia
   C. The main medication antihypertensive for the patient with BCR comprises IECA, diuretic and
calcium blockers
   D. Verapamil in combination with IECA supplementary reduces proteinuria
   E. It is recommended the association between a diuretic of loop and thiazide in case of resistance
to the diuretic of loop alone

47. **Regarding the neurologic complications in BCR the following are NOT TRUE:** (501-502) M
   A. Polyneuropathy is frequently symptomatic, the patient presenting “hot soles”
   B. Uremic encephalopathy appears secondarily to calcifications of small veins at the level of brain
   C. Rarefaction of the white substance (leukoplakia) and sub-clinic infarctions represent the sub-
layer of cognitive alteration
   D. Depression is an independent predictor of mortality because it is associated with non-
  adherence and abandon of treatment
   E. Gabapentin can be responsible with the appearance of delirium in people with advanced BCR

48. **Which of the following statements regarding the adjustment of the medicine dose chosen in
   BCR are NOT TRUE:** (504-505) G
   A. Usually eRFG over 60 ml/min does not impose the reduction of dose
   B. In case of pretibial oedema, 10 kg are deducted from the body weight
   C. In case there are serum overflows, 15 kg are deducted from the body weight
   D. In general, in the antibiotic treatment the charge dose is modified, the doses of maintenance
   remaining the same
   E. Adjusting the dose of the chosen medicine can be done by decreasing the dose with every
   intake and the increase of the number of use per day

49. **Which of the following statements regarding administration of medicine in BCR are TRUE:** (502-
505) M
   A. In general, for the patient with BCR all the comorbidities must be treated, regardless of the
   number of medicine or intake per day
   B. In the case of treatment with digoxin, it is recommended the monitoring of digoxinemia
   C. Preparations of plants and nutritional supplements that can be given without receipt can be
   useful in BCR
   D. Simultaneous illness of the liver imposes the reduction of medicine doses by 20%
   E. The equations of estimation of eRFG are not valid in case the serum creatinine has big variations
daily
50. **Which of the following are NOT indications of immediate reference for nephrology examination of the patients with BCR:** (506) G
   A. Increase of over 1.5 time of the creatinine within 7 days
   B. Albuminuria over 3000mg/g
   C. Hb under 10g/dL
   D. Suspicion of LES
   E. HTA resistant to treatment (over 4 antihypertensive)

51. **Which of the following are NOT indications of routine sending to nephrology examination for the patients with BCR:** (506) U
   A. BCR with very high risk
   B. Accelerated progression of BCR
   C. Recurrent kidney stones
   D. Nephritic syndrome
   E. Nephrotic syndrome

52. **Which of the following are indications of routine sending to nephrology examination for the patients with BCR:** (506) M
   A. Hypertensive crisis (over 180/120 mmHg)
   B. Nephrotic syndrome
   C. Acute injury of the kidney
   D. Severe acidosis
   E. Reduction of eRFG with 5 ml/year

53. **Which of the following statements regarding the antibiotics in BCR are TRUE:** (503) G
   A. Tetracycline can increase the nitrogen retention
   B. It is counter recommended to associate furosemid with penicillin
   C. Fluoroquinolones have risk of crystalluria when eRFG decreases under 15 ml/min
   D. It is recommended to reduce the doses of tetracycline for eRFG under 45ml/min
   E. Neurotoxicity appears at high doses of penicillin administered when eRFG is under 15ml/min

54. **The treatment of calciphylaxy includes:** (501) M
   A. Parathyroidectomy must be practiced rapidly
   B. Administration of dicumarinice anticoagulants must be interrupted
   C. Administration of UFH must be interrupted
   D. Hyperbaric oxygen-therapy favours the healing of the wounds
   E. As first intention, it is done the surgery cleaning of the injuries, anti-biotherapy and analgesia

55. **Regarding the calciphylaxy, the following are NOT TRUE:** (501) M
   A. Skin biopsy is rarely practised
   B. It is a disease similar to the systemic sclerosis
   C. Necrosis appears secondary to the calcification of the intimate of the small derma arterial veins
   D. It starts as papule, nodules or indurate, edematiate erythematous plaques
   E. There is no efficient treatment, but some patients respond to big doses of prednisone

56. **Regarding the platelet dysfunction in BCR the following are TRUE:** (499) G
   A. In case of acute haemorrhage threatening life in patients who do not tolerate volemic overcharge, treatment is done with cryoprecipitate
B. In case of acute haemorrhage threatening life in patients who do not tolerate volemic overcharge, treatment is done with fresh blood.
C. Conjugated estrogens can be useful.
D. Characteristic to the plaque dysfunction, there is a short time for bleeding, with times of normal prothrombin and activated prothrombin.
E. The tendency of bleeding is the characteristic of BCR even from an eRFG under 45ml/min.

57. The main pathogenic factors of pancreatitis in BCR are: (498) U
   A. Secondary hyperparathyroidism
   B. Medicine
   C. Gallstones
   D. Hypertriglyceridemia
   E. High incidence of autoimmune diseases

58. The medicine treatment of delirium in BCR is done with: (502) U
   A. Gabapentin
   B. Carbamazepine
   C. Amitriptyline
   D. Haloperidol
   E. Olanzapine

59. The risks of the treatment with erythropoietin are: (499) U
   A. Increase of blood pressure
   B. Vascular cerebral accidents
   C. Thrombosis of the venous path
   D. Progression of neoplasia
   E. Progression of heart failure

60. The following are uremic toxins: (492, 496) U
   A. Para-cresol phosphate
   B. Asymmetric dimethyl arginine
   C. Homocysteine
   D. AGF
   E. Sulfate indoxyle

61. Indications of corticosteroid therapy in nephropathy Ig A are: (528) G
   A. Serum creatinine in increase and RFG decreasing (not under 30 ml/min)
   B. If there is proliferation or necrosis at the level of the loops
   C. If proteinuria is not remitted within 3-6 months under treatment with IECA
   D. Presence of tubular atrophy and extended interstitial fibrosis
   E. Presence of glomerulosclerosis

62. Consequences of urinary loss of proteins in nephrotic syndrome are: (533-536) U
   A. Troubles of coagulation
   B. Decrease of serum concentration of thyroid hormones
   C. Increase of serum concentration of dicumarinice anticoagulants
   D. Hyperlipoproteinemia
   E. Decrease of ionized calcium
63. Which of the following are secondary causes of glomerulopathy with minimum injuries: (538) U
   A. Atopies
   B. Treatment with AINS
   C. Treatment with macrolides
   D. Primitive Biliary Cirrhosis
   E. Breast cancer

64. Which of the following statements regarding clinic manifestations in rapidly progressive glomerulonephritis are NOT TRUE: (530) M
   A. It presents a sudden clinic debut, by hematuria and nephritic syndrome
   B. HTA is in general severe
   C. Signs of a systemic disease can appear: pulmonary infiltrate, purple, hepatosplenomegaly
   D. Hematuria is constant
   E. Hypocomplementemia appears in pauciimmune forms

65. Which of the following statements regarding the glomerular syndromes are TRUE: (521) G
   A. In rapidly progressive glomerulonephritis, patients develops kidney failure in 1-3 months
   B. Nephritic syndrome appears quasi-constant in membranous glomerulopathy and advanced diabetic ia și nephropathy
   C. Asymptomatic urinary anomalies are manifested most frequently by recurrent proteinuria
   D. Hepatorenal syndrome is one of the new supplementary syndromes
   E. Nephrotic syndrome is the clinic equivalent of the glomerular inflammation and it associates massive proteinuria

66. Which of the following statements regarding the colouring in optic microscopy are TRUE: (520) G
   A. Congo red colour is used to underline the amyloid
   B. PAS is used for the study of the wall of the glomerular capillaries, Bowman capsule, basal tubular membrane, mesangial expansion and deposits
   C. Masson tricrom colouring is used to underline the areas of sclerosis and collagen
   D. Hematoxylin eosinophilic allows the general appreciation and differentiation of the cellular elements
   E. The silver - methenamine colouring underlines the deposits of amyloid, the areas of sclerosis and collagen

67. Regarding the dynamic ASLO, the following are TRUE: (525) G
   A. ASLO reach the maximum level 3-4 weeks after the debut of streptococcus infection
   B. ASLO start to grow 10-14 days after the debut of the glomerulopathy
   C. The level of ASLO is tightly related to how severe the glomerulonephritis is
   D. In skin infections, the diagnostic value ASLO decreases
   E. After reaching the maximum ASLO decreases gradually

68. Which of the following statements regarding the focal and segmental glomerulosclerosis are NOT TRUE: (540-541) G
   A. At optical microscopy, the proliferation of mesangium is noticed
   B. At immunofluorescence, deposits of type Ig M and C3 are noticed in the areas of sclerosis
C. It is characterised by areas of sclerosis limited to a large number of glomeruli and that affects some loops (focal)
D. It can appear in vesico ureteral reflux
E. It presents foot modifications with membranous glomerulopathy

69. **Regarding the nephrotic syndrome, the following are NOT TRUE:** (531-533) U
A. Proteinuria is over 3.5 g/1.73 m²/day
B. Proteinuria is under 3.5 g/1.73 m²/day
C. Crystals in cross of Malta can be present
D. Hyperlipaemia appears as a consequence of the overproduction of apoproteins
E. There is risk of bleeding because of the loss of coagulation factors through urine

70. **In which of the following affections were described deposits of Ig A at mesangial level:** (526) U
A. Cirrhosis
B. Henoch purple
C. Celiac disease
D. Lupus
E. Syndrome Goodpasture

71. **Which of the following statements regarding nephropathy Ig A are TRUE:** (526-527) U
A. It is frequently primary
B. It is characterised by a glomerular deposit Ig A in mesangium, visible at immunofluorescence
C. It usually manifests as macroscopic hematuria appeared 1-2 days after a superior respiratory infection
D. Complementemia is low
E. Fish oil influences favourably the evolution of the disease

72. **Glomerulonephritis membranoproliferative is characterised from the morphological point of view by:** (544) G
A. Type I presents mesangium deposits and subendothelial ones
B. Type II presents at immunofluorescence deposits of C3 without immunoglobulins along the glomerular basal membrane
C. Type III presents deposits both subendothelial and subepitelial
D. According to the localisation of the deposits, it is divides into 3 types
E. Type II presents the duplication of the walls of the glomerular capillaries

73. **Which of the following statements regarding the treatment of the glomerulopathy with minimum injuries are TRUE:** (539) G
A. “Steroid responsive” relapse appear maximum 3 times a year
B. Cyclophosphamide is recommended for patients with frequent relapse
C. Cyclosporine is recommended for patients where there are relapses after the treatment with cytostatics
D. Rituximab has favourable effect
E. Relapse short time after corticosteroids indicates a “frequently relapsing” form of disease

74. **Regarding the classification of the rapidly progressive glomerulonephrites, the following are TRUE:** (529) M
A. Syndrome Goodpasture associate the infections of respiratory superior tract
B. The pauciimmune forms are represented by microscopic poliangeita, granulomatosis Wegener and syndrome Churg-Strauss
C. Most of them are caused by immune complexes
D. There can exist at the same time both ANCA and antibodies anti glomerular basal membrane
E. Rapidly progressive glomerulonephrite can overlap on a membrane glomerulopathy

75. The treatment of the rapidly progressive glomerulonephrite comprises: (531) G
A. Pulse corticotherapy with methylprednisolone is the basic therapy
B. Plasmapheresis is recommended to remove the circulating immune complexes
C. Cyclophosphamide is given in pulse and then orally for 2-4 weeks
D. Azathioprine is frequently used in the therapy of remission induction
E. In patients with high creatinine and elements of chronicity at puncture biopsy, the chances of renal recovery are reduced

76. Which of the following statements regarding the paraclinic explorations in post-streptococcus glomerulonephritis are NOT TRUE: (525) M
A. Serum complement is normal
B. Rarely even cryoglobulines can appear
C. Creatinine and urea are in general moderately increased or normal
D. Renal biopsy is recommended when the bacteriologic and serologic arguments of the streptococcus infection are missing
E. The renal puncture biopsy is recommended in case of extended massive proteinuria

77. Which of the following statements regarding the types of injuries in glomerulonephrite are TRUE: (520-521) G
A. The extra capillary proliferation is characterised by formation of “half moon” secondary to the increased of the number of cells inside the Bowman capsule
B. Subepitelial deposits are located between the basal membrane and the parietal cells of the Bowman capsule
C. The visible granulation deposits by immunofluorescence are usually formed of glomerular basal antimebrane antibodies
D. Global injuries are injuries that interest over 50% of the glomeruli
E. Segmentary injuries are injuries limited to certain loops

78. Which of the following statements regarding the non-immune mechanisms of the glomerular injuries are NOT TRUE: (519) U
A. Nodules Kimmelstiel-Wilson appear in HTA
B. In syndrome Alport mutations appear on the genes that codify the chain 3 of collagen IV
C. In diabetes mellitus SRAA contributes to the intra-glomerular high blood pressure
D. The increase of production of amyloid AA is one of the mechanisms in diabetic nephropathy
E. In Fabry disease, it is produced the accumulation of a glycopeptides

79. Regarding the glomerulopathy with minimum modifications, the following are TRUE: (538) U
A. injuries of glomerulosclerosis appear at optic microscopy
B. At immunofluorescence, deposits of Ig G are noticed
C. It is clinically expressed by massive proteinuria
D. The debut is frequently sudden, after a superior respiratory infection
E. In children, the most frequent is the primary form and it is necessary the renal biopsy

80. Which of the following statements regarding the treatment of glomerulonephrite post-streptococcus are TRUE: (525) M
   A. Early anti-biotherapy of the streptococcus infection with penicillin can prevent the appearance of glomerulopathy
   B. The immuno-suppressor therapy is recommended for patients with extra-capillary proliferation
   C. Therapy of oedemas is frequently done with IECA and furosemide
   D. The antihypertensive treatment is done by injections in the hypertensive encephalopathy
   E. Rest in bed is recommended for patients with important HTA, macroscopic hematuria or massive oedemas

81. Causes of postglomerular hematuria are: (523) U
   A. Renal and urinary lithiasis
   B. Gonococcal urethritis
   C. Malignancies
   D. Renal vein thrombosis
   E. Hypercalciuria

82. For the glomerular origin of the hematuria, the following plead: (523) U
   A. Appearance of hematuria together with gastroenteritis
   B. Combination hematuria and proteinuria over 2-3 g/24 hours
   C. Association of hematuria with deafness and sight troubles in Fabry disease
   D. Urine with aspect of “coca cola”
   E. Presence of hematic cylinders

83. Which of the following statements regarding the chronic cystitis are NOT TRUE: (562) M
   A. It has the same etiologic agents as the acute cystitis
   B. It can be also caused by bacillus Koch
   C. Adenoma of prostate is a favouring factor
   D. At the brief examination of urine, significant bacteriuria is noticed, together with proteinuria and leucocyturia
   E. In the spurt, the therapy lasts for 7-14 days

84. Which of the following are acute complications of PNA: (553) U
   A. Pyonephrosis
   B. Chronic disease of kidney
   C. Chronic pielonephrite
   D. Papillary necrosis
   E. Perinefretic phlegmon

85. Which of the following statements regarding the clinic PNA are NOT TRUE: (551) M
   A. The debut is sudden by urinary frequency, frequent and compelling micturition, pain above the pubis and sub-feverishness
   B. Lumbar pain can be absent in patients with chronic alcoholism
   C. Ascendant propagation is suggested by the presence of cystic syndrome before the debut of PNA
D. It is accompanied by digestive manifestations: frequently a diarrheal frame and secondarily vomit and nausea
E. Lower-back pain is frequently of colicky type

86. **Which of the following statements regarding the NTI acute and infectious, associated with systemic infections, are TRUE:** (549-550) M
   A. Infection with *Hantavirus* is transmitted by rodents
   B. Infection HIV rarely determines the NIA
   C. Leptospirosis determines especially the NIA and it is transmitted by contact with urine of animals that carry it, which contaminates the soil and water
   D. The urine exam shows proteinuria, urinary sediment with leukocytes, eosinophils and hematuria
   E. Proteinuria is usually above 1g/24 ore, but does not reach nephrotic rang

87. **Which of the following statements regarding the treatment of PNC are TRUE:** (557-558) M
   A. Anti-biotherapy of short term (7-14 days) is recommended in acute cases
   B. Anti-biotherapy of long term (6 weeks-6 months) is recommended in ITU recurrent
   C. Tubular dysfunction makes difficult to obtain a bactericide urinary concentration
   D. Macrolides can be used, adjusting the doses to eRFG
   E. In hyponatremia kitchen salt is administered

88. **Complications of PNC are:** (557) U
   A. HTA in 1/3 of the case with advanced PNC
   B. Xanto granulomatous pyelonephritis
   C. GSFS in patients with RVU
   D. Pyonephrosis (in presence of obstructive nephropathy)
   E. Perinefretic phlegmon

89. **Treatment of RVU includes:** (560) U
   A. For the new-born, it is recommended the Biseptol
   B. For adults, quinolones can be administered
   C. For pregnant women ITU, cephalosporins of generation 3 are administered for the whole duration of pregnancy
   D. Ureteral re-implant is not practised anymore extensively
   E. It is recommended to maintain TA below 130/80 mmHg

90. **Which of the following statements regarding the symptoms of RVU are TRUE:** (558-559) M
   A. For adults, it manifests through HTA and lumbar pain when the bladder is full, accentuated at the beginning of the micturition
   B. Fever is an important clinic sign at any age and it suggests an episode of PNA
   C. For children under 3, the general signs are dominant
   D. For children over 3 the urinary signs are dominant: dysuria, pyuria, enuresis at night
   E. For big children, it is underlined the proteinuria, light HTA, progressive reduction of RFG, with installation of BCR

91. **Screening of RVU is indicated for the following groups of subjects:** (559) U
   A. Children with hypospadias
   B. Children with double basinet
C. Children with supernumerary kidney  
D. Families with a member with HTA at young age  
E. Children with ureteral duplicity

92. **Which of the following statements regarding the paraclinical data in PNC are TRUE:** (556) M  
A. Positive urinalysis is constantly present  
B. Leukocyte cylinders appear frequently and show the renal origin of leucocyturia  
C. In case of the association with GSFS proteinuria can be over 3.5g/24 day  
D. Hyperchloraemic acidosis and hypokalemia can be found  
E. Urinary osmolality is over 500 mOsm and urinary density is over 1022

93. **Which of the following statements regarding the prostatitis are NOT TRUE:** (561) M  
A. Acute prostatitis presents perineal pain or lumbar pain intermittently, difficult micturition and hemospermia  
B. In the acute prostatitis PSA can increase, but it decreases immediately after the debut of the antibiotic  
C. Persistence of PSA imposes repeated TRUS, possibly biopsy  
D. The most frequent etiologic agents are: *E.Coli, Klebsiella, Pseudomonas, Enterococcus*  
E. Chronic prostatitis can be associated with acute epididymitis

94. **Symptoms of respiratory acidosis do NOT include:** (572-573) U  
A. Crises of tetany can appear  
B. Cerebral oedema can appear  
C. It can lead to respiratory arrest  
D. Tachycardia, HTA vasodilatation  
E. It manifests through hyperventilation

95. **Symptoms of metabolic alkalosis include:** (573) U  
A. Hyperventilation  
B. Dynamic ileus  
C. Inexplicable fever  
D. Convulsions  
E. Cerebral oedema

96. **Symptoms of metabolic acidosis include:** (572) U  
A. Respiration Kussmaul  
B. Convulsions  
C. Tetany  
D. Paraesthesia  
E. Reduction of diastolic blood pressure

97. **Which of the following statements regarding the causes of acid-basic troubles are TRUE:** (569) M  
A. The loss of bicarbonate through urine leads to metabolic acidosis  
B. Exaggerated excretion of acids leads to metabolic acidosis  
C. Obstruction of aerial paths leads to respiratory acidosis  
D. Dalicylates cause respiratory alkalosis  
E. Hypoxia produces increase of alveolar ventilation and produces respiratory acidosis
98. **Acidosis with normal GA and hyperkalemia appears in:** (570) M
   A. Distal renal tubular and hyperglycaemic acidosis  
   B. Administration of HCl  
   C. Distal renal tubular and hypocalcemia acidosis  
   D. Administration of inhibitors of carbonic anhydrase  
   E. Post hypocarbia

99. **Physical and chemical laws of acid-basic and hydroelectrolitic balance has the following,**  
   **EXCEPT:** (569) M  
   A. Law of electro-negativity: sum of the positive charge must be lower than the sum of negative charge 
   B. Law of iso-osmolarity: in the fluids of the body between which water circulates, osmolarity must be the same 
   C. The body tends to re-install always the normal pH  
   D. Law of electro-positivity: the sum of the positive charge must be superior to the sum of negative charge 
   E. Laws of electro-negativity and iso-osmolarity interfere if there are semi-permeable membranes

100. **Treatment of metabolic callose includes:** (573-574) G  
    A. In form of response to the administration of chlorine, it is recommended spironolactone  
    B. Mechanic hyperventilation  
    C. Administration of acids is rarely necessary (0.1 mol/l HCl in peripheral vein)  
    D. For patients with bicarbonatemia under 40 mEq/l and kidney failure, it is recommended extra-renal treatment  
    E. Avoid excess of alkaline food

101. **Consequences of alcalosis are:** (572) M  
    A. Hyper-excitability of central nervous system  
    B. Depression of central nervous system  
    C. Hyperventilation  
    D. Deviation to the right of the curb of oxyhemoglobin dissociation  
    E. Hypokalemia

102. **Which of the following statements regarding the dehydration are NOT TRUE:** (578) M  
    A. In case of reducing the plasmatic volume, the elasticity of the teguments decreases, the eye balls get hypotonia, the membranes and teguments are dry  
    B. In case of reducing the interstitial volume, low blood pressure appears  
    C. Slight dehydration is characterised by lack of water of 5% of the body weight, manifested by thirst and adynamic  
    D. In severe dehydration there are hallucinations and delirium  
    E. Severe dehydration is characterised by lack of water of 6-10% of the body weight

103. **Symptoms of hypokalemia are:** (585) U  
    A. Tachycardia, extrasystoles, modifications ECG  
    B. Kaliopenic nephropathy  
    C. Metabolic acidosis  
    D. Flaccid paresis  
    E. Paralytic ileus
104. **Aetiology hyponatraemia comprises:** (583-584) M
   A. Hypotonic infusions administered in excess
   B. Corticotherapy
   C. Mechanic ventilation with non-humid air
   D. Open massive wounds
   E. Diuretic treatment

105. **Symptoms of hyponatraemia do NOT comprise:** (581) M
   A. At Na⁺>120 mmol/l the patient is asymptomatic
   B. At Na⁺ between 115-125 mmol/l appear anorexia, nausea, vomit
   C. At Na⁺<115 mmol/l appear convulsions, coma, bradycardia, respiratory failure
   D. At Na⁺ 125-130 mmol/l the patient presents agitation, myalgia, hypoventilation
   E. At Na⁺<115 mmol/l appear hallucinations, incontinence, sleeplessness and confusion

106. **Regarding the plasmatic osmolalitay in hyponatraemia, the following are TRUE:** (581) M
   A. It increases in hyperglycaemia and uremia
   B. It is normal in hyperlipidemia and hypoproteinemia
   C. It is low in the irrigation of the genitourinary tract with glycine
   D. It is low if it is lower than 300 mOsm/kg H₂O
   E. It increases if it is more than 295 mOsm/kg H₂O

107. **Which of the following manifestations of ECG are present in hyperkalemia:** (587) M
   A. Wave P is absent at potassium level between 6-7 mmol/l
   B. QRS is enlarged at potassium level between 8-10 mmol/l
   C. Wave T disappears at potassium level between 8-10 mmol/l
   D. For the patients with pacemaker, the first sign of hyperkalemia is the dissociation of the rhythm of the contraction stimulus
   E. Asystole can appear at potassium level over 10 mmol/l

108. **Regarding the hydro- electrolytical balance, the following are TRUE:** (575-576) M
   A. Tonicity refers to the effect of the osmotic pressure of a solution on the cellular volume
   B. Osmolality of a solution is determined by the total concentration of the particles dissolved or colloids in that substance
   C. Osmolality is also called osmolarity
   D. The intracellular compartment comprises 1/3 of the total quantity of water
   E. The osmolar gap is the difference between the values measured and calculated of the serum osmolality

**IX. PEDIATRICS**

**Complement simple:**

1. **Aetiology of epileptic crises in the period pre-birth is represented by the following, , EXCEPT:** (2)
   U
   A. Malformations of the cerebral cortex
   B. Intra-uterus infections of the central nervous system
C. Hypoxic-ischemic encephalopathy
D. Chromosome anomalies
E. Neurofibromatosis type I

2. **Regarding the epileptic spasms, which of the following statements is TRUE?** (4) G
   A. It has massive and global muscular contractions with axial predominance
   B. It is in general unilateral and asymmetrical at the muscles of neck, trunk and extremities
   C. Typically, the epileptic spasms are "in extension" and can represent the unique type of convulsion
   D. Spasms "in flexion" determine the sudden flexion of the head, trunk and arms, with the flexion of legs or more rarely and extension of legs and arms
   E. It is found in the idiopathic generalized epilepsies: EMJ, EAJ, EAC

3. **The following can be epileptic manifestations taking place in the neonatal period, WITH THE EXCEPTION OF:** (6) U
   A. Pyridoxine-dependent
   B. Neonatal hypocalcaemia
   C. Early myoclonic encephalopathy
   D. Severe myoclonic epilepsy
   E. Early infantile epileptic encephalopathy

4. **Which of the following statements about Status Epilepticus (SE) is NOT true?** (13) G
   A. It is defined by WHO as "an epileptic seizure that repeats itself at short intervals, in order to create a fixed and lasting epileptic condition"
   B. The precipitating factor of SE could be the absolute or relative withdrawal of AEDs
   C. SE can be non-convulsive or convulsive
   D. Non-convulsive SE is classified according to ictal EEG recorded changes
   E. Convulsive SE is classified as: absence-type SE and complex partial SE

5. **The following can be stated about the chronic treatment with antiepileptic drugs (AEDs), WITH THE EXCEPTION OF:** (14) G
   A. Aims to achieve complete control over seizures with minimal side effects
   B. The choice of AEDs depends on the generalized or focal type of seizure
   C. The interaction between different AEDs is recommended (ideal in dual/combination therapy)
   D. The duration of treatment is determined by the type of epileptic syndrome
   E. The correct dose of AEDs is the lowest dose that provides the control of seizures without the occurrence of side effects

6. **The following statement about antistreptolysin O antibody titer (ASLO) is NOT true:** (20) M
   A. It is recommended to detect streptococcal infections and to monitor the evolution of these diseases in time
   B. The titer increases in the case of 80% of patients
   C. The serum peak is reached after 2-3 weeks of onset
   D. The return to normal of ASLO values does not indicate healing
   E. In dynamic, the ASLO titre increase 2-4 times in comparison with the basal level

7. **In acute subglottic edematous laryngitis, the child does NOT develop:** (23) U
   A. Barking cough
B. Inspiratory stridor  
C. Inspiratory dyspnea  
D. Expiratory dyspnea  
E. Suprasternal and supraclavicular retraction

8. Which is the bacterial agent frequently found after the age of 5 in patients with otitis media?  
(28) M  
A. *Streptococcus pneumoniae*  
B. *Haemophilus influenzae*  
C. *Moraxella catarrhalis*  
D. *Staphylococcus aureus*  
E. *Pseudomonas aeruginosa*

9. The following can be stated about the clinical forms of acute otitis media (AOM), WITH THE EXCEPTION OF: (30) G  
A. Catarrhal AOM is a consequence of inflammation that occurs secondary to Eustachian tube blockage  
B. The otoscopic examination in suppurative AOM reveals an edematous eardrum that bulges out the perforation hole  
C. The recurrent acute otitis is defined by 3 episodes of AOM within the time frame of 6 months  
D. The main symptom of suppurative AOM is violent otalgia, which is exaggerated by deglutition and mastication  
E. Otomastoiditis - manifested form that occurs most often in malnourished, premature infants and those with immunodeficiency disorders

10. The following are growth modulators present in mature human milk, WITH THE EXCEPTION OF: (36) U  
A. *Bifidum* factor  
B. Hydroxylase Sulphur  
C. Taurine  
D. Alpha-amylase  
E. B-lymphocyte stimulator

11. The main factors of malnutrition can be the following, WITH THE EXCEPTION OF: (42) U.  
A. Prematurity  
B. Gemelarity  
C. Chronic neurological disorders (cerebral palsy)  
D. Multiple pregnancy  
E. Intrauterine growth restriction

12. The method through which a qualitative deficit in producing malnutrition CANNOT occur, is: (41) M  
A. Early or late diversification in relation to the infant's chronological age  
B. Insufficient intake of powder milk  
C. Milk formulas that are inadequate to the caloric and nutritional needs of the infant  
D. The infant's extended and exclusive diet with cow's milk  
E. Vegetarian diets
13. Which is the oldest and most commonly used anthropometric index to assess nutritional status? (43) U
   A. Nutritional index (NI)
   B. Stature index (SI)
   C. Arm circumference
   D. Body mass index (BMI)
   E. Tricipital and subscapular skinfold

14. Vitamin \(D_3\)–cholecalciferol is NOT characterized by: (49) M
   A. It is a sterolic compound
   B. It is present in foods of animal origin
   C. It is synthesized in the dermis under the action of sun beams
   D. It can be found in small amounts in foods of plant origin
   E. It is transformed at the level of the skin from exposure to sunlight solar radiation from provitamin D

15. The following statement is NOT true as regards hypervitaminosis D: (52) M
   A. It can be an accidental or iatrogenic complication of the vitamin D treatment
   B. Clinical signs consist in: loss of appetite, vomiting, anorexia, polydipsia, polyuria
   C. Calcemia >10.5 mg/dl and increased serum concentration 25 (OH)
   D. The absence of urinary calcium excretion
   E. Renal calcification and osteosclerosis can occur

16. The paraclinical peculiarities of iron-deficiency anemia are the following, WITH THE EXCEPTION OF: (55) U
   A. Hypochromic
   B. Microcytic
   C. Hyposideremic
   D. Increased HEM
   E. Low CHEM

17. The major routes of transmission of perinatal infections are the following, WITH THE EXCEPTION OF: (61) M
   A. Hematogenous transplacental infections
   B. Infection from other infected individuals
   C. Ascending infections (transcervical infections)
   D. Infection of the fetus during birth (intranatal infections)
   E. Postnatal infections, from the mother

18. The treatment of congenital toxoplasmosis associates: (72) M
   A. Spiramycin and folic acid
   B. Penicillin G and folic acid
   C. Acyclovir and ganciclovir
   D. Valganciclovir and ganciclovir
   E. Pyrimethamine and sulfadiazine

19. TORCH are the initials for the following, WITH THE EXCEPTION OF: (61) U
    A. T- Treponema pallidum
B. O- Others
C. R- Rubella
D. C- Citomegalovirus
E. H- Herpes simplex

Multiple choice:

20. **In the perinatal period, the main causes of epileptic seizures are:** (2) U
   A. Hypoxic ischemic encephalopathy
   B. Intracranial hemorrhage
   C. Cerebral cortex malformations
   D. Neuroinfections
   E. Transitory metabolic dysfunctions

21. **According to electro-clinical features and in relation to etiology, ILAE classifies seizures into:** (2) U
   A. Benign epileptic seizures
   B. Generalized seizures
   C. Malignant epileptic seizures
   D. Focal seizures with or without modification of consciousness
   E. Unclassified epileptic seizures

22. **The simple partial seizures can be with:** (5) U
   A. Motor semiology
   B. Somatosensory or special sensorial symptoms
   C. Vegetative symptoms
   D. Psychiatric symptoms
   E. Loss of consciousness

23. **Epileptic manifestations with onset in the period 1 month – 3 years can be, WITH THE EXCEPTION OF:** (7) M
   A. Severe myoclonic epilepsy
   B. Pyridoxine dependency
   C. Benign myoclonic epilepsy of the infant
   D. Early myoclonic encephalopathy
   E. West syndrome

24. **Choose the syndromes which are part of the term *age-dependent encephalopathy*:** (6) U
   A. Dravet syndrome
   B. Aicardi syndrome
   C. Ohtahara syndrome
   D. West syndrome
   E. Lennox-Gastaut syndrome

25. **Which of the following statements are specific to the West Syndrome (WS)?** (7) G
   A. It is the most common and best-known infantile epileptic encephalopathy
   B. The prognosis in symptomatic form is favorable
   C. The prognosis in idiopathic forms is severe
D. The idiopathic form starts in a child that was neurologically normal until that moment and in which neither etiological factors, nor neuroimaging brain damage are provable
E. The symptomatic form can have multiple causes, being considered a response of the immature brain to different types of lesions

26. The West Syndrome is characterized by the triad: (7) M
   A. Somatosensory or special sensory symptoms
   B. Epileptic spasms in flexion / extension or asymmetrical
   C. Hypsarrhythmia (or variants)
   D. Stop or regression in neuropsychomotric development
   E. Seizures: myoclonic, typical absences and tonic-clonic seizures

27. The following CANNOT be said about the Lennox-Gastaut syndrome: (7) G
   A. It is part of the epileptic manifestations with onset in the neonatal period
   B. It is an epileptic encephalopathy, characterized by generalized polymorphic epileptic seizures (tonic, atonic, atypical absences)
   C. EEG is represented by diffuse slow peak-waves during slow-wave sleep
   D. It has a varied etiology, with many factors involved, such as: EHI, metabolic diseases
   E. The prognosis is favorable

28. The main risk factors for a severe prognosis in the Lennox-Gastaut syndrome are: (8) U
   A. The symptomatic character of the syndrome
   B. Early onset under 3 years old
   C. The increased frequency of the seizures
   D. The absence of Status Epilepticus
   E. The prolonged duration of aggravation periods

29. The following can be stated about simple or benign febrile seizures: (8) U
   A. They occur in the period from 6 months-5 years, in the sudden increase in temperature over 38.5 °C
   B. The duration of the episode exceeds 15 minutes
   C. Usually repeat themselves during one and the same day
   D. Are manifested by bilateral tonic-clonic seizures, rarely tonic or hypotonic seizures
   E. Can be followed by postictal deficit

30. Choose the juvenile epileptic syndromes: (9) U
   A. Childhood benign epilepsy
   B. Childhood absence epilepsy
   C. Juvenile myoclonic epilepsy
   D. Juvenile absence epilepsy
   E. Epilepsy with generalized tonic-clonic seizures upon awakening (EGCTCT)

31. Which of the following statements on sobbing spasms are NOT true? (11) U
   A. Is encountered in children under the age of 5
   B. The cyanotic form, also called reflex anoxic seizures, are less common
   C. The pale forms are constantly provoked by fear, pain, frustration
   D. The EEG is normal
   E. The prognosis is good
32. The non-epileptic paroxysmal manifestations during sleep (hypnic seizures) can be: (12) U
   A. Nocturnal enuresis
   B. Nocturnal verbal automatisms
   C. "Sleep-apnea" syndrome
   D. REM behaviour Disorders
   E. Transient ischemic attacks

33. Syncope is characterized by: (11) G
   A. Transitory loss of consciousness and muscle tone
   B. It is the consequence of a transient failure of cerebral irrigation
   C. Always occurs during the day, almost constantly in standing position, being preceded by suggestive sensations such as: weakness, nausea, epigastric discomfort, blurred vision
   D. Muscle tone loss is progressive, the fall being sudden, rarely slow
   E. The EEG is represented by slow diffuse peak-waves during a slow fall, usually asynchronous, and polypeaks and quick and bilaterally synchronous rhythms when the fall is abrupt

34. Choose the main principles of treatment of status epilepticus (SE): (16) M
   A. Involves general and pharmacological measures
   B. The toxicological determination and plasma concentration of AEDs is not necessary
   C. Pharmacological measures should be initiated as an emergency measure
   D. The prolonged duration of convulsive SE decreases the risk of the occurrence of neural lesions and systemic complications
   E. The first line of therapy includes: lorazepam or diazepam or clonazepam

35. The second line of therapy used in the pharmacological treatment of status epilepticus cumprises: (16) M
   A. Lorazepam
   B. Phenobarbital
   C. Levetiracetam
   D. Phenytoin
   E. Sodium valproate

36. The following could be said about a 25-year old patient, suspected of GABHS pharyngitis, with swollen tonsils, swollen anterior cervical lymph nodes, running a 38.5°C fever, absent cough: (20) M
   A. Has a Centor score ≥ 2
   B. Has a Centor score ≥ 4
   C. Microbiological testing is in order
   D. Microbiological confirmation is not necessary
   E. Treatment can be performed

37. The nonsuppurative complications of GABHS infection are: (21) U
   A. Cervical lymphadenitis
   B. Acute articular rheumatism
   C. Diffuse acute poststreptococcal glomerulonephritis
   D. Otitis media
   E. Peritonsillar abscess
38. **Tonsillectomy, within recurrent GABHS pharyngitis is indicated:** (21) U
   A. If the child has over 2 episodes in the last year
   B. In case of resistance to treatment with penicillin V
   C. If the child has over 5 episodes in the last 2 years
   D. In case of peritonsillar abscess
   E. Persistent mouth breathing

39. **Which of the following statements about simple acute laryngitis are NOT true?** (22) M
   A. It is a rapidly progressive bacterial infection
   B. It is the most common form
   C. The inflammation of the pharynx is highlighted at the clinical examination
   D. The laryngoscopic examination highlights the edema of the vocal cords and subglottic tissue
   E. It is characterized clinically by inspiratory dyspnea and inspiratory stridor

40. **The following statements characterize stridulous laryngitis, WITH THE EXCEPTION OF:** (23) G
   A. It is an obstructive laryngitis, also called acute spasmotic laryngitis or spasmodic croup (pseudocroup)
   B. Allergic susceptibility and psychological factors play an important role
   C. The prodrome lasts 1-3 days and is characterized by rhinorrhea, cough, moderate fever
   D. The onset is insidious, respiratory distress being manifested in 2-3 days
   E. The treatment can be carried out at home

41. **The treatment of viral croup entails:** (24) M
   A. Home treatment in case of milder forms of the disease
   B. The child’s hospitalization in case of medium / severe forms of the disease
   C. The administration of antibiotics for the prophylaxis of bacterial superinfection
   D. The administration of corticosteroids to reduce the swelling of the laryngeal mucosa lining
   E. Aerosols with classical racemic epinephrine or a mixture of 1:1 isomer and L and D epinephrine

42. **The complications of acute epiglottitis CANNOT be:** (25) U
   A. Meningitis
   B. Otomastoiditis
   C. Retropharyngeal abscess
   D. Septic arthritis
   E. Peritonsillar abscess

43. **According to the American Academy of Pediatrics (AAP), the definition of AOM is based on the following criteria:** (27) G
   A. A recent history of the disease with an acute onset
   B. The presence of exudate at the level of the middle ear, suggested by either of the following elements: bulging eardrum, reduced or absent eardrum mobility, hydroaeric levels behind the eardrum, otorrhea
   C. Signs and symptoms of inflammation of the middle ear, suggested by either of the following elements: obvious eardrum erythema, otalgia
   D. Signs and symptoms of inflammation of the middle ear, suggested by either of the following elements: hypoacusis, retracted eardrum
E. The presence of exudate at the level of the middle ear, suggested by either of the following elements: opaque or perforated eardrum, reduced or diminished light reflex of the eardrum

44. **In the new-born, the most commonly incriminated bacterial agents in otitis media are:** (28) U
   A. *Streptococcus pneumoniae*
   B. *Haemophilus influenzae*
   C. *Escherichia coli*
   D. *Klebsiella*
   E. *Staphylococcus aureus*

45. **The intratemporal complications that can occur in the development of otitis are:** (30) U
   A. Facial nerve paralysis
   B. Lateral and sigmoid sinus thrombophlebitis
   C. Acute or chronic mastoiditis
   D. Cholesteatoma
   E. Acute labyrinthitis

46. **In cases of proven otitis with multidrug-resistant *S. pneumoniae* (serotype 19A), the following can be used:** (32) M
   A. Amoxicillin
   B. Trimethoprim / sulfamethoxazole
   C. Levofloxacin
   D. Erythromycin - sulfisoxazole
   E. Linezolid

47. **Tympanometry is used to:** (30) U
   A. Confirm diagnosis in some atypical cases
   B. Avoiding excessive diagnosis of AOM
   C. Monitoring the evolution of AOM
   D. Differentiation of rapidly and completely cured AOM of OM in which exudate persists, even asymptptomatically, a situation that requires patient reexamination
   E. Confirmation of the diagnosis in all cases

48. **The following CANNOT be stated about otomastoiditis:** (29) G
   A. The latent form appears in eutrophic infants who have not previously been treated with antibiotics
   B. Latent form onset is sudden, accompanied by high fever, auricular symptoms and intense general symptoms
   C. The manifest form occurs especially in malnourished children and has an insidious onset
   D. In manifest form, after eardrum perforation, the symptoms yield and healing can in many cases be spontaneous
   E. The latent form can present the symptoms of a general disease, agitation and somnolence predominating

49. **As regards milk formula, the following statements are TRUE:** (37) G
   A. Premature formulas are calorically enriched 20-24 kcal/30 ml, are emulsified, which simplifies the digestion and absorption processes
B. Human milk fortifiers (HMF) are used only in naturally fed children with a low birth weight, under 2500g
C. The start formulas for infants are enriched with vitamins and mineral nutrients
D. The continuation formulas are recommended for infants older than 4-6 months, in parallel with diversified diet
E. The soy formulas are indicated in the dietary treatment of premature infants and in cystic fibrosis

50. **The general principles used in baby food diversification are:** (38) M
   A. The diet must be balanced
   B. The choice of the first diversification food is individualized depending on the infant's development peculiarities
   C. Each food must be introduced progressively and nonselectively
   D. The calorific value of the new food must have approx. 65 kcal/100 g
   E. In order to stimulate the habit for sweetness, sugar has priority over polysaccharides

51. **In producing malnutrition, the determinant factors are the following, WITH THE EXCEPTION:** (40) M
   A. Nutritional deficiency through quantitative and qualitative deficiency
   B. Acute and chronic infectious diseases
   C. Care deficiencies
   D. Congenital malformations
   E. Unfavorable environmental conditions

52. **The state of nutrition of a 1 year old child, with a current weight of 7000 g, current height of 65 cm, (ideal weight = 9000 g, ideal height = 75 cm) is determined thus:** (43) G
   A. Stature Index (SI) = 0.86
   B. Ponderal index (PI) 0.86
   C. Ponderal index (PI) = 0.77
   D. Depending on PI, the patient has type II dystrophy
   E. Depending on PI, the patient has type I dystrophy

53. **The following statements are TRUE about protein–calorie malnutrition (PCM) gr. I:** (44) M
   A. The skin is pale
   B. PI = 0.90-0.76; IN = 0.90-0.81
   C. Low digestive tolerance and appetite
   D. The adipose tissue is diminished on the chest and abdomen
   E. The appearance of a thin infant

54. **The following statements are FALSE about protein–calorie malnutrition (PCM) gr. III:** (44) M
   A. Ponderal deficit > 40%
   B. The ponderal curve is descending in steps
   C. The digestive tolerance is compromised, "hungry" or infectious diarrhea occurs
   D. It is difficult to reverse
   E. The skin is pale

55. **The following statements do NOT characterize nutritional marasmus:** (45) U
   A. It is the most severe form of protein malnutrition, of extreme gravity
B. It is a disease with major nutritional deficits, concerning all nutrient, vitamin and mineral principles
C. The abdomen is excavated and hollowed
D. Hepatomegaly occurs through fatty liver infiltration (steatosis)
E. In extreme forms, hypothermia, bradycardia, bradypnea and hyporeactivity occur

56. The following statements are TRUE about the Kwashiorkor form of malnutrition: (46) U
A. It is a form of protein malnutrition, especially concerned with protein metabolism
B. It is characterized by significant edema at the level of the face and limbs
C. Skin appendage and tegument changes occur
D. The abdomen is excavated and slightly hollowed
E. Constant weight deficit

57. Complex pathogeny in severe forms of malnutrition is characterized thus: (47) M
A. Hypoglycemia determined hypoinsulinism, with the release in circulation of free AG
B. Gluconeogenesis processes decrease
C. Muscle protein anabolism increases as a consequence of cortisolemia increase
D. Basal metabolism is reduced through hypotonia, bradycardia, tendency to collapse
E. Hypernatraemia, intracellular dehydration due to digestive losses

58. In malnutrition, the assessment criteria of treatment efficiency are: (48) U
A. Intestinal transit normalization
B. Weight gain resumption (occurs 6-8 weeks from stool normalization)
C. Immune recovery (25-30 days)
D. Clinical recovery (2-3 weeks)
E. Mental and motor normalization

59. The bone changes encountered in deficiency rickets are represented by the following, WITH THE EXCEPTION OF: (51) U
A. "Olympian" forehead
B. "Bell"-shaped thorax
C. Ligamentous hyperlaxity
D. Neuromuscular hyperexcitability
E. The presence of "rickets bracelets" at the level of the upper limbs

60. According to rickets staging, stage II is characterized by: (52) U
A. Hypocalcemia
B. Hypophosphatemia
C. Elevated alkaline phosphatase
D. Normocalcaemia
E. Normofosfatemia

61. The pathognomonic bone signs highlighted radiologically in deficiency rickets are: (52) M
A. The widening of long bone metaphyses which take the appearance of a "cup" with a concave, irregular, blurred and fringed metaphyseal line
B. Widening of long bones metaphyses which take the appearance of a "cup" with a convex, regular, faded and fringed metaphyseal line
C. The absence of lateral spikes
D. The delayed ossification of growth nuclei, of long bone diaphysis and ribs
E. The presence of lateral spikes

62. The following statements about deficiency rickets treatment are FALSE: (53) G
   A. Prophylaxis of rickets in children must begin as early as the last trimester of pregnancy
   B. In postnatal prophylaxis, the use of $D_3$ vitamin preparations in oral solution, is recommended to
      be administered daily starting with the age of 7 days up to 12 months
   C. The curative treatment of rickets with vitamin D is recommended only after clinical, radiological
      and biological confirmation of the diagnosis
   D. Injectable preparations are used only in exceptional cases: malabsorption syndrome, biliary
      atresia
   E. In curative treatment, 400-800 UI $D_3$/day, by oral route, for 6-8 weeks, is recommended

63. Iron deficiency can be determined through the following mechanisms and causes: (56) M
   A. Rapid depletion of quantitatively reduced reserves: prematurity, gemelarity
   B. Increased intake of protein of animal origin, prolonged dairy diet
   C. Increased losses through chronic hemorrhage, hemosiderinuria, protein exudation
   D. Absorption and digestive disorders which can be selective (cmucoviscidose, celiac) or global
      (Riley disease)
   E. Increased necessary: prematurity, dismaturity, puberty

64. The clinical signs of Fe tissue deficit within iron-deficiency anemia are the following, WITH THE
    EXCEPTION OF: (56) U
   A. Trophic disorders of the skin and mucous membranes
   B. Pallor
   C. Commissural rhagades
   D. Brittle nails
   E. Fatigue

65. Prelatent Fe deficiency is characterized by: (58) U
   A. Absent Fe reserves
   B. Normal serum iron
   C. Low serum iron
   D. Low serum ferritin
   E. Low transferrin saturation coefficient

66. The following statements about the clinical forms of iron-deficiency anemia are FALSE: (58) M
   A. Nutritional iron anemia is a consequence of inadequate dietary intake of iron
   B. Posthaemorrhagic chronic anemia is reversible under iron therapy, in the conditions of solving
      hemorrhagic manifestations
   C. Anemia of prematurity is defined through its early onset in the first 7-10 days of life
   D. Pulmonary haemosiderosis is the most common form, is defined through recurrent intraalveolar
      pulmonary haemorrhage accompanied by typical iron-deficiency anemia
   E. Pica disorder defines some dietary habits of consuming inedible substances

67. The treatment of iron-deficiency anemia targets iron substitution, thus: (59) M
   A. The profilaxy begins in the prenatal period and continues in the postnatal one
B. The curative treatment aims at restoring iron homeostasis
C. The dietary means aim to initiate a correct diet, avoiding cow's milk and flours
D. As drug treatment, the administration of iron salts by oral route is recommended
E. Blood transfusion has restricted indication for the treatment of severe forms, with hemoglobin levels < 7 g/100 ml

68. In perinatal infections with varicella-zoster virus and Toxoplasma gondii, the relatively specific manifestations are: (62) U
   A. Intracranial calcifications
   B. Cataract
   C. Microcephaly
   D. Hydrops fetalis
   E. Cardiac anomalies

69. The most common characteristic anomalies associated to congenital rubella are: (63) M
   A. Occular (cataract, retinopathy)
   B. Cardiac (persistent aterial duct)
   C. Bone ("genu varum", "genu valgum")
   D. Neurological (microcephaly, mental retardation)
   E. Dental (changes in the first molar, Hutschinson teeth)

70. Congenital infection with cytomegalovirus (CMV) is the main cause of: (64) U
   A. Heart abnormalities
   B. Neurosensorial hypoacusis
   C. Mental retardation
   D. Retinopathy
   E. cerebral palsy

71. The following statements are TRUE about the method of transmission of neonatal infections with Herpes simplex virus (HSV): (65) M
   A. It can be transmitted from the mother even before birth (intranatal infection)
   B. It can be transmitted during birth, when passing through the vagina (ascending infection)
   C. It is rarely possible in transplacentalintrauterine transmission
   D. It can be transmitted in maternity from another infected newborn (postnatal infection)
   E. Cesarean birth increases the risk of intranatal transmission of the virus

72. The clinical pictures of the perinatal infection with HSV can be: (66) M
   A. Disseminated disease (pneumonia, hepatitis, shock)
   B. Neurological disease (lethargy, fever, convulsions)
   C. Localized disease (dentition, auditory and ocular channel)
   D. Disseminated disease (bacteremia, arthritis, meningitis)
   E. Localized disease (dermal, ocular, oral cavity)

73. Which of the following statements are TRUE as regards the perinatal infection with Chlamydia trachomatis? (68) G
   A. It is the most common congenital infection in developed countries
   B. The most common location of the colonization is the ocular one (70%)
   C. Neonatal conjunctivitis occurs 5-14 days after birth and lasts for 1-2 weeks
D. Pneumonia occurs 2-19 weeks after birth and is characterized by the absence of fever
E. Topical prophylaxis with silver nitrate, erythromycin or tetracycline is effective in the
    prophylaxis of conjunctivitis with C. trachomatis

74. **The Hutchinson triad entails the coexistence of:** (69) M
   A. Tooth malformations (Hutchinson teeth)
   B. Ocular lesions (interstitial keratitis)
   C. *Hydrops fetalis*
   D. Anemia
   E. Deafness due to the cranial nerve VIII damage

75. **The treponemal serological testing includes:** (69) M
   A. The fluorescent antitreponemal antibody absorption (FTA-ABS) test
   B. The direct fluorescent antibody staining of *T. pallidum* test (DFATP)
   C. The microhemagglutination assay for *T. pallidum* antibodies (MHA-TP)
   D. The *T. pallidum* particle agglutination assay (TP-PA)
   E. VDRL test (Venereal disease research laboratory)

76. **A confirmed case of congenital syphilis is one in which:** (70) M
   A. The newborn from a HIV-positive mother has clinical signs, CSF changes or bone lesions on
      x-rays
   B. Treponemes are demonstrated through dark field microscopy
   C. The nontreponemal antibody titer of the newborn is 4 times higher than that of the mother
   D. The newborn has a treponemal serological test for IgM positive antibodies
   E. The mother with positive serology was not treated, was incorrectly treated or was treated
      less than a month before birth

77. **In the congenital infection with *Toxoplasma gondii*, the serum diagnosis is based on:** (72) G
   A. The presence of IgA or IgM specific antibodies in the first 6 months of life
   B. The isolation of microorganisms from the placenta or umbilical cord blood
   C. The growth of specific or IgG specific antibodies in the infant compared with the mother's
titre
   D. The persistence of specific IgG antibodies after the age of 6 months
   E. PCR test for amniotic fluid or CSF

**X. NEUROLOGY**

**Single choice:**

1. **The following statements about internal carotid arteries are true, WITH THE EXCEPTION OF:** (76) U
   A. Each comes from the fork of the carotide a. common on each side
   B. The left common carotid artery originates in the aortic arch
   C. The right common carotid artery originates in the fork of the brachiocephalic trunk
   D. In their laterocervical path to the base of the skull, the internal carotid arteries give rise to the
      ophthalmic artery
   E. Each penetrates into the skull through the anterior broken fossa

2. **Which of the following statements about the blood–brain barrier (BBB) is FALSE?** (79) U
A. In optimal conditions, ensures the nutrition of the nervous tissue
B. Does not allow evacuation towards the venous circulation of the substances resulting from the cellular metabolism
C. An important role in carrying out the major functions of the BBB is played by the local hemodynamic control, achieved through normal endothelial function and pericytes
D. It has the capacity to carry out the transendothelial passage of some useful biochemical components from the blood capillary in a controlled manner
E. The antithrombotic function of the BBB endothelium ensures the normal fluidity of the capillary circulation

3. **The essential aspects of the pathophysiology of cerebral ischemia does NOT refer to:** (84) M
   A. Overcoming the possibilities for self-regulation of cerebral blood flow in the territory of the affected vessel, concomitant with a vasomotor reaction in the vicinity of the ischemic outbreak and even at a distance from it
   B. Profound metabolic alterations intricate with the inflammatory ones that occur in the area of cerebral infarction, especially in the ischemic penumbra
   C. Vascular reactions and BBB alteration generated by certain phenomena
   D. Water entering in the nerve tissue cells, resulting in cerebral edema in the infarction area
   E. Reactive decrease of systemic blood pressure representing an adaptive phenomenon of cerebral perfusion recovery

4. **Lacunar stroke is NOT characterized by:** (87) G
   A. It is a clinical-imaging entity, which refers to small strokes
   B. It is located in the territory of the central/perforating arteries at the base of the cerebral hemispheres and of the paramedian arteries
   C. In over 85% of cases are the consequence of atherothrombotic embolies
   D. It can be manifested clinically through relatively characteristic neurological syndromes
   E. A very large number of lacunar strokes are clinically silent when they occur

5. **The following CANNOT be said about cardioembolic stroke:** (88) G
   A. Have an increased severity and represent 20-40% of all ischemic strokes
   B. The most common cause is atrial fibrillation
   C. Has a high risk of recurrence (approx. 10%/year)
   D. It is extremely important to identify patients because the administration of secondary prevention therapy entails a significant decrease in stroke recurrence
   E. It has a lower tendency towards rapid haemorrhagic transformation

6. **The early tomodensitometric signs that confirm the ischemic nature of strokes are the following, WITH THE EXCEPTION OF:** (92) M
   A. Deletion of cortical gyrations in an area of a cerebral hemisphere
   B. Deletion of the demarcation line between the cortex and the subcortical white matter in an area of the brain
   C. Increasing density in a superimposable area of the brain on vascular territory which topographically corresponds to the location of clinical signs
   D. The unilateral deletion of the normal "picture" of the structures from the basal ganglia region
   E. The presence of the spontaneous contrast of the injured middle cerebral artery corresponding to the clinical picture
7. Which of the following statements about the specific emergency therapeutic measures of ischemic stroke is FALSE? (95) G
   A. Reperfusion therapy with IV-administered rtPA in a therapeutic window of maximum 4.5 hours after the onset of the first clinical sign of stroke
   B. For basilar artery occlusion, fibrinolysis can be performed
   C. Before fibrinolysis, blood pressure values must be below 185/110 mmHg
   D. Heparins with low molecular weight are recommended after 24-72 hours from the occurrence of the stroke
   E. In the first 48 hours from the occurrence of an ischemic stroke, aspirin by oral route, or in combination with dipyridamole is recommended

8. The risk factors associated with a higher frequency of hemorrhagic stroke can be the following, WITH THE EXCEPTION OF: (98) U
   A. Chronic hypertension
   B. Old age
   C. Female sex
   D. The presence of ApoE2 and ApoE4 alleles
   E. The presence of cerebral microbleeds

9. The following statements about aneurysmal subarachnoid hemorrhage (SAH) treatment, are true, WITH THE EXCEPTION OF: (105) M
   A. Decreases in BP values could favor rebleeding, and increases in values facilitate the occurrence of vasospasms and late cerebral ischemia
   B. Anti-fibrinolytics can be used, but only in the early period and limited to the surgical/endovascular treatment of the aneurysm
   C. The treatment of the cerebral vasospasm begins with the early management of the ruptured aneurysm
   D. Natremia correction can be made by administering acetate fludrocortisone and hypertonic saline solution
   E. If patients had epileptic seizures in the past, anticonvulsant treatment is recommended

Multiple choice:

10. The terminal branches of the internal carotid artery distributed towards the irrigation of brain parenchyma are NOT: (77) U
    A. Anterior cerebral arteries
    B. Middle cerebral arteries (sylvian)
    C. Anterior choroidal arteries
    D. Phhthalmic arteries
    E. Anterior spinal artery

11. The cerebral small vessel disease occurs at the level of the: (78)
    A. Central arteries
    B. Cerebral arteries
    C. Paramedian arteries
    D. Branches of the circle of Willis
    E. Cerebral arteries in their proximal segments
12. The following statements about the main hemodynamic adaptive systems that can provide collateral circulation at the level of the encephalon are TRUE: (79) M
   A. The major functional role of the Circle of Willis is to protect cerebral tissue against the disastrous injuries of the obstruction of one of the major arteries
   B. When the Circle of Willis becomes unfunctional, an increase in flow on one of the cervical arteries with cerebral destination can be the cause of a massive infraction
   C. The leptomeningeal anastomoses are carried out in the subarachnoid space between the border cortical branches of the 3 major cerebral arteries
   D. The anastomoses of the branches of the external carotid arteries and of the intenal and vertebral carotid arteries limit the consequences of encepha
dalon lesions when a major vasular obstruction is installed on an arterial feed vessel to the cerebral tissue
   E. The most important anastomosis is that which occurs between the branches of the meningeal arteries and the branches belonging to internal carotid arteries

13. The self-regulation of cerebral blood flow is carried out through the participation of some major types of mechanisms and is characterized by: (81) M
   A. Operate interdependently and have a different functional share in different segments of the cerebral vascular bed
   B. The neurogenic mechanisms act predominantly at the level of the large cerebral arteries of the leptomeningeal ones
   C. The metabolic mechanisms are essential for regional and local adaptation of the cerebral blood flow at the level of small intra parenchymatous vessels and at the level of cerebral microcirculation
   D. The dependence regarding metabolic needs is carried out by local vasoconstrictor agents
   E. The endothelial function is essential in all the segments of the vascular bed in order to regulate cerebral vasomotricity

14. Choose the CORRECT answers about TIA: (85) U
   A. It is a reversable form of ischemic stroke
   B. Determines structural brain lesions
   C. It is a brief episode of dysfunction determined by a focal brain or retinal ischemia
   D. The clinical symptoms typically last less than 1 hour and with no evidence of acute infarction
   E. The differential diagnosis with other neurological conditions and paroxysmal manifestations of relatively short duration is imposed

15. The following statements about the etiology of ischemic stroke are TRUE: (84) M
   A. The most common forms of ischemic stroke are cardioembolic strokes
   B. Atherothrombotic ischemic stroke is on second place
   C. Rheumatic atrial fibrillation is the most common cause of cardioembolic stroke
   D. Of all the causes related to vessel wall pathology, cervical-cerebral artery dissection is the most common cause in patients under the age of 45
   E. There is a significant percentage of cryptogenic ischemic stroke (15-20%)

16. Choose the CORRECT statements about the mechanism of production of transient ischemic attack (TIA): (85) M
   A. The hemodynamic mechanism entails the existence of a significant arterial stenosis
   B. The most common occurs due to a coagulation disorder
   C. The thromboembolic mechanism can occur through an arterio-arterial platelet embolism
D. The thromboembolic mechanism can sometimes occur through a small emboli originating from any other emboligen source
E. It can rarely be due to an inflammatory microangiopathy

17. The following statements about the forms of cerebral stroke are FALSE: (86) G
A. Silent strokes do not have a clinical expression at the moment in which they occur, but can be identified through MRI
B. The cerebral infarctions become symptomatic in the sense of a progressive clinical deterioration over time
C. The major brain strokes are the consequence of cerebral large vessel disease and cardiogenic embolisms
D. The cerebral microinfarcts are the consequence of cerebral small vessel disease, of hypertensive cause
E. Lacunar infarctions are a consequence of microangiopathies, other than those caused by chronic HTA

18. Lacunar syndromes can be clasically subdivided into the following clinical forms: (88) U
A. Pure sensory hemiparesis
B. Pure motor hemiparesis
C. Dysarthria syndrome - unable hand
D. Atactic hemiparesis
E. Sensorimotor hemiparesis

19. The syndromes that occur within the obstructive lesions arising within the collateral branches of the vertebrobasilar arterial system are: (91) U
A. Paramedian and circumferential artery syndrome from vertebral and basilar arteries
B. Posterior inferior cerebellar artery syndrome
C. Anterior inferior cerebellar artery syndrome
D. Anterior superior cerebellar artery syndrome
E. Anterior cerebral artery syndrome

20. The following statements are TRUE about the Wallenberg syndrome: (91) M
A. It is also called medial bulbar syndrome or interolivary syndrome
B. It is characterized through alternating
C. The disorder is characterized by thermal-algesic alternative sensitivity (trigeminal contralateral and ipsilateral spino-thalamic)
D. Is associated with brainstem ipsilateral signs (cerebellar syndrome)
E. It is associated with brainstem contralateral signs (Horner syndrome)
F. It is associated with the vestibular syndrome, dysphagia, singultus

21. The following can be said about the Doppler ultrasonography of cerebral vessels: (93) G
A. It is resorted to as emergency line I
B. It is very useful after administering emergency therapy
C. It entails the examinational of the internal carotid arteries in the cervical and vertebral arteries segment
D. It is not necessary to be completed by transcranial Doppler (TCD) ultrasound examination
E. It is an imaging method of choice in case of suspicion of cervicocerebral arterial dissection
22. The general emergency therapeutic measures in case of ischemic stroke refer to: (94) M
   A. Reperfusion therapy with IV rtPA administration
   B. Oxygen administration, if saturation is below 95%
   C. At least in the first 24 hours, to maintain the water balance, 0.9% saline solution and glucose solutions are used
   D. In acute stroke, the routine lowering of blood pressure is not recommended only when BP values are extremely high (>220/120 mmHg)
   E. Antibiotic prophylaxis is recommended in immunocompetent patients

23. The specific emergency therapeutic measures in case of ischemic stroke refer to: (95) U
   A. Reperfusion therapy with IV rtPA administration, in maximum 4.5 hours from the occurrence of the first clinical sign of stroke
   B. Oxygen administration, if saturation is below 95%
   C. Antibiotic prophylaxis is not recommended in immunocompetent patients
   D. In the case of strokes that are unresponsive to therapy through rtPA fibrinolysis, reperfusion through an endovascular neuroradiological interventional procedure is recommended
   E. In patients with severe dysphagia, it is recommended to start refeeding as early as possible, through a nasogastric tube

24. The main recommendations related to secondary prevention after ischemic stroke are: (96) U
   A. LDL-cholesterol levels decrease below 120 mg/dl
   B. Values under 110 mmHg for systolic BP and 70 mmHg for diastolic BP
   C. Antithrombotic-mandatory therapy
   D. Endarterectomy, method of choice in case of symptomatic extracranial internal carotid artery stenosis
   E. Endovascular percutaneous carotid angioplasty is recommended in patients chosen with hemodynamically significant symptomatic carotid artery stenosis

25. The following statements about platelet antiaggregation therapy, used in secondary prevention after ischemic stroke, are TRUE: (96) G
   A. It is mandatory if the patient does not have indication for anticoagulation therapy
   B. Clopidogrel monotherapy is preferred
   C. Aspirin monotherapy is preferred as first choice treatment
   D. An alternative is the association between aspirin and dipyridamole
   E. Combined therapy with clopidogrel plus aspirin can be used in patients who had an ischemic stroke and have unstable angina

26. Which of the following statements about anticoagulation therapy used in secondary prevention after ischemic stroke are FALSE? (97) M
   A. It is recommended in patients with partial controlled seizures
   B. It can be done with sicumarinics or with non-antivitamin K anticoagulants and with new antithrombotics
   C. It is the recommendation in the first line in patients with atrial fibrillation
   D. It is not recommended in patients with gastrointestinal bleeding or low compliance
   E. It is not recommended in case of large aortic atheromas and fusiform basilar a. aneurysm

27. Choose the TRUE statements about endovascular surgical and interventional therapy used in secondary prevention after ischemic stroke: (97) M
28. The following statements about the etiology of intra parenchymatous cerebral hemorrhages are FALSE: (98) M
   A. They are the consequence of chronic changes in structural qualities of vascular walls
   B. The most common cause in young people are vascular malformations
   C. In 50-70 year old adults, the most common cause is amyloid angiopathy
   D. In the elderly (over 70 years old), the main cause is the small vessel disease determined by chronic hypertension
   E. Other less common causes include coagulation disorders

29. In intra parenchymatous cerebral hemorrhages, the most important negative prognostic factors in relation with survival are the following: (100) U
   A. Severe cerebral edema
   B. Young age
   C. Increased volume of the hematoma and its irregularly shaped
   D. High Glasgow Coma Scale (GCS) associated with elevated BP values upon hospitalization
   E. Infratentorial location

30. The following statements about the general therapeutic measures taken in intra parenchymatous cerebral hemorrhages are NOT true: (101) M
   A. High blood pressure should be treated promptly if it exceeds 180/110 mmHg
   B. High blood pressure should be treated promptly, if the mean arterial pressure (MAP) is higher than 130 mmHg
   C. The use of statins is recommended because it decreases the risk of cerebral hemorrhage recurrence
   D. In order to prevent the recurrence of hemorrhage, the therapeutic target of BP in patients suffering from DM or from chronic kidney disease should be 140 mmHg for systolic BP and 90 mmHg for diastolic BP
   E. The therapeutic target of BP in patients suffering from hypertensive small vessel disease should be 130 mmHg for systolic BP and 80 mmHg for diastolic BP

31. The following statements about the specific therapeutic measures taken in intra parenchymatous cerebral hemorrhages are TRUE: (101) M
   A. Patients with severe clotting disorder through clotting deficiency or severe thrombocytopenia should receive appropriate substitution treatment
   B. They should receive substitution with vitamin K-dependent clotting factors associated with iv administered vitamin K
   C. The monotherapeutic administration of factor VIIa is recommended
   D. After the bleeding stops, low doses of low-molecular-weight heparin is recommended
E. The use of statins is recommended because they lower the risk of recurrent cerebral hemorrhage

32. The most common locations of intracranial aneurysms are: (103) U
   A. Ophthalmic artery
   B. Pericallosal artery
   C. Posterior cerebral artery
   D. The anterior portion of the circle of Willis
   E. Posterior communicating artery

33. The objective neurological and general clinical examination in the case of subarachnoid hemorrhages highlights the presence of: (105) U
   A. Signs of meningeal irritation
   B. Kernig, Brudzinski, bilateral Lasegue signs, common in the first few hours of onset
   C. Peripapillary subhyaloid hemorrhage, found at the ophthalmoscopic examination
   D. Full bladder and urinary retention (sometimes)
   E. Diminished/abolished ROT within the first 4 hours of the onset of bleeding

34. The following statements about aneurysmal SAH treatment are TRUE: (105) M
   A. Decreased BP values can favor rebleeding
   B. The use of epsilon-aminocaproic acid and tranexamic acid is contraindicated
   C. Cerebral vasospasm treatment starts with the early management of the ruptured aneurysm
   D. Hyponatremia management is done through the administration of increased volumes of hypotonic fluids
   E. Nimodipine is the only drug that reduces the risk of vasospasms and late cerebral ischemia

XI. RHEUMATOLOGY

Single choice:

1. The rheumatoid factor can be present in the following categories of people, WITH THE EXCEPTION OF: (110)
   A. Patients diagnosed with essential mixed cryoglobulinemia
   B. 10-15% of the healthy people
   C. Patients diagnosed with autoimmune hepatitis
   D. 40% of the healthy people
   E. Transient in bacterial and viral infections

2. In rheumatoid polyarthritis, joint damage is characterized by: (114)
   A. Pain and morning stiffness lasting at least 60 minutes
   B. Redness of the superjacent integuments
   C. Additivity
   D. Asymmetry of affected joints
   E. Functional damage occurs suddenly

3. Which of the following types of joints are NOT commonly affected in rheumatoid polyarthritis: (115)
   A. Diarthrodial joints
   B. Radiocubitocarpal joints
   C. Distal interphalangeal joints
D. Metacarpophalangeal joints  
E. Proximal interphalangeal joints

4. **Which of the following radiological changes are NOT found in rheumatoid polyarthritis:** (118)  
   A. Subluxations and luxations determined by cartilage destruction  
   B. Tumefaction of periarticular soft tissues  
   C. Joint space widening due to subchondral erosions  
   D. Joint space narrowing  
   E. Marginal, geodes and microgeode erosions

5. **Which of the following statements about methotrexate is NOT true:** (121)  
   A. It is a structural analogue acting by dihydroorotate dehydrogenase enzyme inhibition  
   B. Has cytostatic, immunosuppressive and anti-inflammatory action  
   C. Concomitant administration of folic acid decreases its toxicity  
   D. Has oligospermia-like side effects  
   E. Methotrexate side effects are more common in first 6 months

6. **Which of the following is NOT a part of group A features of ankylosing spondylitis:** (131)  
   A. Psoriasis  
   B. Uveitis  
   C. Imaging-proven sacroiliitis  
   D. Family history of ankylosing spondylitis  
   E. The presence of HLA-B27

7. **Which of the following statements about lumbar pain in ankylosing spondylitis is FALSE:** (133)  
   A. It improves after physical effort  
   B. It extends for at least 3 months  
   C. Is common in young adults under the age of 40  
   D. Usually occurs in the second half of the night  
   E. Is accompanied by morning stiffness for maximum 30 minutes

8. **Which of the following statements about diffuse skeletal hyperostosis is TRUE:** (137)  
   A. It is an inflammatory condition  
   B. Commonly occurs in women under the age of 30 due to metabolic imbalances  
   C. It is accompanied by abnormal chest expansion  
   D. Determines a marked limitation of movements in the affected segments  
   E. The presence of HLA-B27

9. **At the radiological examination in ankylosing spondylitis, grade III sacroiliitis is characterized by the following:** (136)  
   A. Pseudo-widening of the articular space due to subchondral erosions  
   B. Suspected sacroiliitis with a bleary joint appearance  
   C. Periarticular sclerosis with diminished articular interlining  
   D. Sacroiliac joint ankylose  
   E. Bony bridge formation between the sacrum and the ilium bone

10. **Which of the following statements about arthritis mutilans is NOT true:** (143)  
    A. It is a rare onset manifestation
B. It is an extensive-osteolytic form that usually affects the proximal phalanges
C. It is associated with metacarpal and metatarsal damage
D. It is associated with extended cutaneous psoriasis
E. It is associated with axial spondylitis

11. The most sensitive acute phase reactant in psoriatic arthritis is: (144)
   A. Accelerated ESR
   B. Elevated uric acid values
   C. Elevated A immunoglobulin levels
   D. Serum amyloid A level
   E. The presence of circulating immune complexes

12. Which of the following statements about the use of photochemotherapy in psoriatic arthritis is TRUE: (148)
   A. It has a constant effect on peripheral psoriatic arthritis
   B. It is not considered to be a risk factor in skin cancer
   C. It has an adverse effect in skin lesion control
   D. Has a risk of toxic accumulations and increased incidence of skin cancer
   E. The use of narrowband ultraviolet B radiation indicates an increased carcinogen risk

13. Which of the following statements about joint damage in systemic lupus erythematosus is NOT true: (154)
   A. It is a polyarticular, symmetrical affection
   B. It especially affects large joints
   C. It can also affect the knee joint
   D. Exudative synovitis is usually minimal
   E. The painful symptoms target the periarticular soft parts

14. Which of the following is a subacute cutaneous lesion in SLE: (155)
   A. Malar rash
   B. Bullous lupus
   C. Papulosquamous lesions
   D. Generalized erythema
   E. Panniculitis

15. Which of the following is a class IV type C in the classification of lupus nephritis: (158)
   A. Focal proliferative nephritis affecting <50% of glomeruli, the lesions are chronic and inactive
   B. Diffuse proliferative nephritis affecting <50% of glomeruli, the lesions are chronic and inactive
   C. Diffuse proliferative nephritis affecting >50% of glomeruli, the lesions are active and chronic
   D. Diffuse proliferative nephritis affecting >50% of glomeruli, the lesions are chronic and inactive
   E. Diffuse proliferative nephritis affecting >50% of glomeruli, the lesions are active

Multiple choice:

16. Which of the following are NOT determining factors in rheumatoid arthritis: (110)
   A. Smoking
   B. The presence of HLA-B27
   C. The female sex
D. Candida albicans infection  
E. The positive rheumatoid factor  

17. In rheumatoid polyarthritis, the exudative synovitis stage is manifested through the following: (111)  
A. Hyperplasia of the synovial membrane  
B. The presence of the synovial pannus  
C. Interstitial edema  
D. The presence of granulation, hypertrophied and hypervascularized tissue  
E. Endothelial cell alteration  

18. The most common adverse effects of sulfasalazine are, WITH THE EXCEPTION OF: (122)  
A. Leukopenia with neutropenia  
B. Pulmonary fibrosis  
C. Nausea, vomiting, abdominal pain and diarrhea  
D. Hepatic fibrosis  
E. The presence of pruritus  

19. Which of the following statements about the examination of the synovial fluid in rheumatoid arthritis are FALSE: (118)  
A. It has a transudat character  
B. 75% PMN presence  
C. Absent rheumatoid factor  
D. Increased complement concentration  
E. Glucose concentration can be very high  

20. In rheumatoid polyarthritis, the following statements about the carpal tunnel syndrome are TRUE: (115)  
A. Affects fingers V and half of IV  
B. Is determined the the increased elasticity of the transverse carpal ligament  
C. Generates pain and numbness inside the territory of the median nerve  
D. Is determined by carpal inflammation and the inelasticity of the transverse ligament  
E. Affects fingers I, II, III and half of IV  

21. The "gooseneck" hand deformity in rheumatoid arthritis is manifested by the following, WITH THE EXCEPTION OF: (115)  
A. Distal interphalangeal hyperextension and proximal interphalangeal flexion  
B. Shortening of interosseous muscles with traction effect on extensor tendons  
C. Proximal interphalangeal hyperextension and distal interphalangeal flexion  
D. Exaggerated adduction of the first metacarpal  
E. Shortening of interosseous muscles with traction effect on flexor tendons  

22. The following statements about Baker’s cyst are false, WITH THE EXCEPTION OF: (116)  
A. It is an accumulation of adipose tissue  
B. It occurs due to increased intra-articular pressure  
C. Generally fuses in the anterior calf muscles  
D. It is manifested through the presence of the synovial fluid in the posterior articular compartment  
E. It can be misinterpreted as a profound thrombophlebitis
23. In rheumatoid polyarthritis, the radiological examination reveals the following, WITH THE EXCEPTION OF: (118)
   A. Juxta-articular osteoporosis
   B. Joint space widening
   C. Subluxations and luxations due to the destruction of cartilage, capsules, tendons, ligaments and bones
   D. "Bamboo" column appearance
   E. Periarticular soft tissue tumefaction

24. Some of the statements about the use of corticotherapy in rheumatoid polyarthritis are TRUE: (120)
   A. It is used as a "bridge therapy" in initiating remissive therapy
   B. It is administered locally in the large joints in which the inflammation persists
   C. It is not administered in systemic manifestations
   D. They have symptomatic effect with slow onset
   E. They have negligible side effects

25. Which of the following statements about the use of leflunomide are TRUE: (122)
   A. Is administered once per week
   B. It is an immunosuppressor that acts through dihydroorotate dehydrogenase inhibition
   C. The therapeutic response is maximal after 4 weeks
   D. Does not decrease radiological progression
   E. Often leads to side effects like hypotension

26. Which of the following statements about balneo-physical treatment in rheumatoid polyarthritis are NOT true: (125)
   A. Prevents osteoporosis and muscular atrophies
   B. Can be applied in the exacerbation phase
   C. Must be applied only in the disease remission stage
   D. Must only be applied in exacerbation
   E. Can relieve pain and reduce inflammation

27. Arthrosis differs from rheumatoid polyarthritis in that: (120)
   A. Joint stiffness lasts under 30 minutes
   B. The pain is accentuated after physical effort
   C. Symmetrical joint damage
   D. The presence of rheumatoid factor in osteoarthritis
   E. The presence of osteophytes in arthrosis

28. In rheumatoid polyarthritis, Felty's syndrome is characterized by the following, WITH THE EXCEPTION OF: (117)
   A. Neutrophilia
   B. Neutropenia
   C. Splenomegaly
   D. Cardiomegaly
   E. Hepatomegaly and lymphocytosis

29. Which of the following statements about rituximab are TRUE: (124)
A. It is a fully humanized monoclonal antibody
B. It is directed against the CD28 receptor on the surface of the T lymphocyte
C. It is successfully used in the treatment of Hodgkin lymphoma
D. Improves clinical symptoms in rheumatoid polyarthritis and stops the progression of structural lesions
E. It is administered by intravenous route

30. The following statements about certolizumab are FALSE: (123)
   A. It is a chimeric monoclonal antibody
   B. It is a TNF-α soluble receptor
   C. It consists only of the Fab fragment of the pegylated immunoglobulin molecules
   D. It is subcutaneously administered every two weeks
   E. The Fab's fragment of the immunoglobulin is pegylated

31. The main side effects of TNF-α-blocking therapy are the following, WITH THE EXCEPTION OF: (123 - 124)
   A. Heart failure worsening
   B. Pulmonary fibrosis
   C. Risk of developing neoplasia
   D. Hepatic fibrosis
   E. Increased risk of tuberculosis reactivation

32. Which of the following statements about eye disease in rheumatoid polyarthritis are specific: (117)
   A. The onset of iridocyclitis
   B. The onset of scleromalacia perforans
   C. Eye damage secondary to leflunomide treatment
   D. The onset of keratoconjunctivitis sicca
   E. The onset of episcleritis

33. Which of the following are NOT important characteristic features of spondyloarthritis: (129)
   A. Symmetrical oligoarthritis
   B. Dactylitis
   C. Intestinal and skin inflammation
   D. Enthesitis
   E. Skin and genital lesions

34. In ankylosing spondylitis, the episodes of acute anterior uveitis are manifested as follows: (135)
   A. They are frequently bilateral
   B. Are manifested only through iris swelling
   C. The iris appears to be discolored compared to the controlateral one
   D. The pupil has an irregular appearance and is increased
   E. The pupil is small and in some cases it can have an irregular appearance in the presence of synechiae

35. The New York clinical criteria for diagnosing ankylosing spondylitis are: (137)
   A. The limitation of lumbar spine motion in the sagittal and frontal planes
   B. Unilateral sacroiliitis of grade 3-4
C. Low back pain and stiffness for a period longer than 3 months which improves with physical activity and does not disappear at rest
D. Sacroiliitis > grade 2, bilateral
E. All of the above are clinical criteria

36. **Which of the following statements about the evolution of ankylosing spondylitis are TRUE:** (137)
   A. The early onset of the disease is associated with a lower degree of severity
   B. The juvenile forms are marked by axial joint damage
   C. The presence of recurrent iritis is a negative prognostic factor
   D. The juvenile onset of the disease does not influence the development of the disease in any way
   E. 15% of patients with ankylosing spondylitis with onset at the age of 15-16 will require hip prosthesis in the next 15 years

37. **In severe cases of ankylosing spondylitis / peripheral spondyloarthritis, the second choice treatment comprises the following, WITH THE EXCEPTION OF:** (138)
   A. Etanercept
   B. Methotrexate
   C. Parenterally administered glucocorticoids
   D. Golimumab
   E. Sulfasalazine

38. **The main side effects in the therapy with biological agents in ankylosing spondylitis are the following:** (139)
   A. Risk of severe allergic reactions
   B. Low risk of neoplasia, anti-TNF having a role in anti-neoplastic defence
   C. Risk of anti-dsDNA antibodies
   D. Risk of immunogenicity induction
   E. Risk of demyelinating disease

39. **Cardiovascular damage in ankylosing spondylitis is manifested as follows, WITH THE EXCEPTION OF:** (135)
   A. Aortic insufficiency
   B. Atrial fibrillation
   C. Conduction abnormalities
   D. Adam Stokes
   E. Myocarditis

40. **The administration of glucocorticoid in ankylosing spondylitis is characterized by:** (138)
   A. Oral administration has a high efficacy both in spondylitis as well as in the other spondylarthritides
   B. Parenteral administration is more effective than oral administration
   C. They have disease-modifying effect
   D. They can be administered topically by intra-articular route in peripheral arthritis
   E. They can be administered by intralesional route in entheses

41. **Psoriatic skin lesions in ankylosing spondylitis are characterized by:** (144)
   A. The specific skin lesion is the erythematous-squamous placard
   B. The presence of detachable squamae without bleeding
   C. They occur mainly in flexion areas
D. They occur mainly on elbows and knees
E. Nail damage is usually accompanied by skin lesions

42. Which of the following associations are NOT the therapy of choice in unresponsive severe psoriatic arthritis: (147)
A. Sulfasalazine and cyclosporin
B. Nonsteroidal anti-inflammatory drugs and sulfasalazine
C. Methotrexate and cyclosporine
D. Sulfasalazine and glucocorticoids
E. Cyclosporine and nonsteroidal anti-inflammatory drugs

43. Psoriatic polyarthritis is characterized by the following, WITH THE EXCEPTION OF: (143)
A. Asymmetry and predilection for large joints
B. It is characterized by the possibility of progressive conversion
C. Its subsequent evolution is limited to only a few joints
D. It is the most common onset manifestation
E. Generally affects the large joints

44. In psoriatic arthritis, the radiological examination can reveal the following characteristic elements, WITH THE EXCEPTION OF: (144)
A. The absence of juxta-articular osteoporosis
B. Pharyngeal distal extremities displayed in "cup", having the typical appearance of a "pen in ink bottle"
C. Telescoped appearance of the fingers
D. Resorption of proximal phalanges in mutilating arthritis
E. Osteolysis with predilection at the level of the metatarsals

45. The most common environmental factors incriminated in the etiology of psoriatic arthritis are the following, WITH THE EXCEPTION OF: (142)
A. HLA-B57
B. Type A beta-hemolytic streptococcal infections
C. PSORS1 gene
D. HLA-DR4
E. The presence of HLA-B27

46. Spondyloarthropathy is characterized by the following, WITH THE EXCEPTION OF: (143)
A. Commonly bilateral sacroiliitis
B. Associated sacroiliitis and spine damage with oligoarticular peripheral arthritis
C. Associates mechanical pain
D. Has a favourable development
E. Associates inflammatory pain, stiffness and functional deficit

47. The PASI score in psoriatic arthritis is characterized by the following: (145)
A. Assesses joint damage
B. Assesses the presence of dactylitis and enthesitis
C. Assessed erythema, infiltration and scaling
D. Each lesion will be graded from 1 to 6
E. Score 1 on the PASI scale means that it is very little represented
48. **Which of the following statements about methotrexate administration in psoriatic arthritis are TRUE:** (147)
   A. 25mg is administered daily by subcutaneous route
   B. Procollagen I is monitored in the administration of methotrexate
   C. Is the first choice therapy
   D. The liver fibrosis markers are monitored
   E. In some cases, the liver biopsy-puncture is indicated for monitoring

49. **Cyclosporine treatment in psoriatic arthritis is characterized by the following, WITH THE EXCEPTION OF:** (147)
   A. Has a favourable influence of skin damage
   B. Interferes with IL-6 synthesis
   C. Controls the forms of polyarticular disease progression
   D. The urinary dosage of metanephrines is necessary
   E. Interferes with keratinocyte proliferation

50. **Which of the following statements about the occurrence of alopecia in SLE are TRUE:** (155)
   A. Alopecia is reversible in all forms of SLE
   B. Alopecia is reversible only in subacute forms of SLE
   C. Only irreversible alopecia is encountered in chronic forms of SLE
   D. In acute and subacute forms of SLE, alopecia reversible alopecia can be encountered
   E. Alopecia is related to the administration of cytotoxic drugs

51. **The mucocutaneous lesions in SLE are characterized by:** (154)
   A. The subacute lesions are initially erythematous, and later become papular and squamous
   B. The occurrence of "butterfly" erythema at the level of the malar eminences, nasolabial fold and nasal pyramid is nonspecific
   C. The subacute lesions are difficult to distinguish from the lesions of the lichen planus
   D. It is associated with anti Ro and anti La antibodies
   E. The acute lesions are accompanied by hyperkeratosis and atrophy and they leave scars

52. **Which of the following cutaneous lesions are specific to SLE:** (155)
   A. Generalized erythema
   B. Raynaud's syndrome
   C. Panniculitis
   D. Livedo Reticularis
   E. Sclerodactyly

53. **Which of the following statements about the use of synthetic antimalarial drugs in SLE are TRUE:** (162)
   A. They are hyperlipemiant
   B. They are recommended in skin and joint damage and decrease the risk of disease reactivation
   C. Ophthalmologic monitoring is required every 12 months
   D. Naproxen is the most common preparation
   E. The effect is manifested after 6-12 weeks and reaches its peak after 6 months

54. **Capillary pneumonia in SLE is characterized by:** (156)
A. It is common, but it is associated with a low mortality
B. It is associated with the antiphospholipid syndrome
C. It is a rare manifestation
D. It is often associated with the Raynaud phenomenon
E. It is a rare manifestation and it is associated with a low mortality

55. Which of the following neurological disorders in SLE are NOT peripheral: (157)
   A. Aseptic meningitis
   B. Myasthenia gravis
   C. Demyelinating syndrome
   D. Plexopathy
   E. Migrainous syndrome and benign cranial hypertension

56. Polyserositis in systemic erythematous lupus is NOT characterized by: (155)
   A. Pleurisy was described in approximately half of the patients
   B. Pleural effusion is usually unilateral, in large quantity
   C. Pleurisy is never encountered in drug-induced lupus
   D. Pericarditis is the most common cardiac damage in SLE
   E. Peritonitis is rare within serous damage

57. Which of the following are clinical criteria is SLE: (160–161)
   A. Ulcers at the level of the mouth and nose in the absence of other pathologies
   B. Synovitis affecting 2 joints at most
   C. Pericardium pain for at least 3 days
   D. Autoimmune hemolytic anemia
   E. Thrombocytopenia, under 150,000/mm3

58. Anti-ribosomal P protein antibodies in SLE are NOT characterized by: (160)
   A. 95% frequency
   B. They are clinically associated with psychosis
   C. They are non-specific
   D. They do not correlate with the activity of the disease
   E. They are clinically associated with diffuse CNS damage

59. Which of the following side effects are characteristic of cyclosporine: (163)
   A. Gingival hypertrophy
   B. Hypertension
   C. Nephrotoxicity
   D. Haemorrhagic cystitis
   E. Arterial hypertension

60. The side effects specific to mycophenolate mofetil administration in SLE are the following: (163)
   A. Gastrointestinal side effects
   B. Gingival hypertrophy
   C. Increased risk of infections
   D. Ovarian insufficiency
   E. Nephrotoxicity
61. Which of the following specific lesions in SLE are chronic: (155)
   A. Polycyclic lesions
   B. Generalized discoid lesions
   C. Panniculitis
   D. Papulosquamous lesions
   E. Bullous lupus

62. Which of the following antibodies described in SLE are specific: (160)
   A. Anti-ribosomal P protein antibodies
   B. Anti-Ro antibodies
   C. Anti-Sm antibodies
   D. Anti-DNA dc antibodies
   E. Anti-Histone antibodies

XII. GENERAL SURGERY

Single choice:

1. Choose the FALSE statement about pain in acute appendicitis: (168) U
   A. It can be exacerbated by exercise and walking
   B. Coughing accentuates the pain
   C. The antalgic position with the right thigh in flexion and slight abduction is described
   D. The pain is colicky
   E. It can have sudden or insidious onset

2. The following can be said about abdominal palpation in acute appendicitis, WITH THE EXCEPTION OF: (168) U
   A. The Rowsing maneuver is the retrograde mobility of gases, from the left iliac fossa to the epigastrium, with caecal painful distention
   B. McBurney's point is in the painful area
   C. The iliopsoas sign is carried out by using the internal rotation of the thigh
   D. Pain, cutaneous hyperaesthesia and muscular defense in the right iliac fossa define Dieulafoy's symptomatic triad
   E. Iacobovici's painful triangle is medially bounded by the right rectus abdominis muscle

3. The following statement about gallbladder hydrops is CORRECT: (177) U
   A. Represents the migration of a calculus at the level of the duodenum
   B. It is palpated in the right hypochondrium and is sensitive to the touch, in tension, showing signs of peritoneal irritation
   C. The pathogenic substrate is represented by the inclavation of a calculus at infundibular level
   D. It evolves spontaneously, with secure remission, calculus displacement and the remission of symptoms
   E. A hypoechogenyc, characteristic image, with cholecyst distension can be noticed at the ultrasound

4. Which is the CORRECT statement about gallstone treatment? (179) M
A. The existence of a dense pericolecistic adherence process requires emergency laparoscopic surgical treatment
B. The gold standard is the classical, surgical approach
C. The antibiotic treatment is curative, 3rd generation cephalosporins being the treatment of choice
D. In acute cholecystitis, surgical treatment is an emergency procedure
E. Cholecystendesis and cholecystostomy are performed in young patients, who suffer from mild forms that do not require cholecystectomy

5. Which biochemical sample can establish the existence of the biliary retention syndrome: (182) M
   A. Total bilirubin, in which the indirect predominated at a rate of 2/3
   B. Cholesterol values exceeding 250 mg/dl
   C. Alkaline phosphatase values exceeding 150 U.I.
   D. GGT values exceeding 200 U.I.
   E. The presence of urobilinogen in the urine

6. The major bile duct syndrome is defined by the presence of the Charcot triad, which is characterized by the following, WITH THE EXCEPTION OF: (182) U
   A. Duct colic characterized by violent pain in the epigastrium
   B. Septic fever, preceeding chills
   C. Duct colic can be associated with vomiting bile vomiting that relieves pain
   D. Jaundice is manifested through hyperchromia and acholic stools
   E. Jaundice can have an undulating evolution

7. The diagnosis of acute pancreatitis is made based on the following criteria WITH THE EXCEPTION OF: (189) M
   A. Epigastrium-based localized severe abdominal pain, with insidious onset
   B. Increased serum lipase activity, three times higher than the normal maximum values
   C. Characteristic appearance on CT with iv contrast, MRI or abdominal ultrasound
   D. The diagnosis is based on minimum 2 criteria
   E. Acute, persistent, epigatric onset pain, radiating from the right to the left

8. When it comes to acute pancreatitis pathogenesis, the premature activation of trypsin in the pancreatic acinar cells is carried out through the following mechanism: (190) G
   A. Trypsin cleavage in trypsinogen through cathepsin-B lysosomal hydrolysis
   B. The release of chemotactic factors mobilizes the circulating inflammatory cells
   C. The increase in the activity of the intracellular pancreatic trypsin inhibitor
   D. Signaling and mediation mechanism damage through calcium, in the acinar cells
   E. Activation of macrophages and lymphocytes

9. A 59 year old patients arrives at the hospital accusing paroxysmal epigastric pain with radiation from the right to the left. Upon hospitalization, the laboratory tests are: Leucocytosis 21.000/mm³, blood glucose 236 mg/dl, ALT 180 UI/l, LDH 380 UI/l. According to the Ranson score, the TRUE statement is: (197) G
   A. The patient achieved a score of 3 points
   B. The patient has a mild form of acute pancreatitis
   C. The patient achieved a score of 2 points
   D. The patient achieved a score of 4 points
E. The patient has a severe form of acute pancreatitis

10. Which is the FALSE statements about the propagation pathways of the etiologic agent in the peritoneal cavity within primary peritonitis? (205) U
A. Hematogenic
B. Lymphatic
C. Through perforations
D. Ascending genital
E. Transmural with macroscopic bowel wall integrity

11. Which is the CORRECT statement about peritonitis pain? (206) U
A. It is initially generalized, diffuse, after which it becomes localized at the level of the injured visceral projection
B. The onset is usually insidious, rarely brutal, in full health
C. It is the major, constant symptom
D. Radiates from right to left
E. It has a different character according to the etiology: the pain is vague in ulcer perforation and intense in primitive peritonitis

12. Which of the following is a cardiovascular disorder encountered in peritonitis complications? U (213)
A. Bradycardia
B. Quick and weak pulse
C. Arterial hypertension, due to hypovolemia
D. Warm, pink extremities, in the hypodynamic phase
E. Cyanotic extremities, in the hyperdynamic shock phase

13. The CORRECT statement about dynamic occlusions is: (218) M
A. Intestine vasculature is compromised
B. The paralytic ileus is produced through ineffective peristalsis
C. They are given by the existence of a physical obstacle blocking the transit
D. Remission of dynamic occlusion is obtained as a result of surgery
E. They are classified as primitive and secondary

14. Which is the correct answer about the etiology of simple mechanic occlusions of the small bowel? (219) U
A. Fibrous adhesions
B. Bowel tumors
C. Gallstone ileus
D. Hematomas
E. All of the above

15. The complications of mechanic occlusions are the following, WITH THE EXCEPTION OF: (225) U
A. Pulmonary
B. Renal
C. Peritoneal
D. Hypovolemic and septic and toxic shock
E. Neurologic

16. Which is NOT an arterial or venous malformation that can cause upper gastrointestinal hemorrhage? (228) M
   A. Osler-Rendu-Weber syndrome
   B. Mallory-Weiss syndrome
   C. Dieulafoy's lesion
   D. “Blue rubber bleb nevus syndrome”
   E. Watermelon stomach

17. Which of the following statements about UGB forms is CORRECT? (229) M
   A. The loss of 1000ml of blood produces hypovolemic shock or death
   B. Minimum 500ml of blood is required in order to produce melaena
   C. The loss of 400-500ml of blood requires the patient’s hospitalization in intensive care
   D. occult haemorrhage is the loss of under 50ml of blood / day
   E. All of the above

18. Upper gastrointestinal endoscopy, used as a diagnostic method in UGB, has the following risks, WITH THE EXCEPTION OF: (230)
   A. Perforation
   B. Abnormal heart rhythm
   C. Hypoxia
   D. Arterial hypertension
   E. Aspiration

19. A 48 year old patient arrives at the hospital, as a case of emergency, with haematemesis. The endoscopic investigation reveals an adherent blood clot at the level of the lesser curvature of the stomach. According to Forrest's endoscopic classification, the patient is included in the following category: (231) M
   A. Type Ia
   B. Type IIb
   C. Type III
   D. Type IIa
   E. Type IIc

20. The following statement about Rockall risk scoring in UGB is CORRECT: (233) G
   A. The age between 55 and 60 years old is 1 point
   B. Patients with a score of up to 2 points have a high rate of relapse
   C. Renal, hepatic failure or metastasis represent 3 points
   D. The blood present in the upper digestive tract, adherent clot, is 1 point
   E. The bleeding visible vessel is 3 points

21. The resuscitation and stabilization used in the management of severe gastrointestinal bleeding entails the following, WITH THE EXCEPTION OF: (233) M
   A. Adequate venous approach (two thick i.v. cannulae)
   B. Restoration of circulating volume using the general rule of "2-on-1", meaning 2 ml of crystalloid fluid for each ml of blood lost

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C. Correction of coagulopathy
D. Maintaining normothermia
E. Beginning the transfusion of blood and derivatives

22. **The following are absolute indications in the surgical treatment of bleeding caused by gastroduodenal ulcers, WITH THE EXCEPTION OF:** (236) M
   A. Shock associated with recurrent hemorrhage
   B. Endoscopic treatment failure
   C. Reduced but persistent bleeding, requiring more than 3 units of blood / day
   D. Sustained hemodynamic instability in spite of resuscitation
   E. A rare blood type

23. **The risk factors involved in the etiology of colorectal cancer are the following:** (252) U
   A. A diet rich in fat and low in fiber
   B. Alcohol consumption and smoking
   C. Hormonal preparations (consumption of estrogen, tamoxifen)
   D. Viral infections (*Human Papilloma Virus*)
   E. All of the above

24. **The following statement is CORRECT about the TNM staging of colorectal cancer:** (256) G
   A. Stage IIB comprises: T3 N0 M0
   B. Stage 0 comprises Tis N0 M0
   C. Stage IVB comprises any T, any N, M1a
   D. Stage IIIA comprises T4b N0 M0
   E. Stage I comprises T3-T4, N0, M0

25. **Which of the following options is NOT an advantage of neoadjuvant therapy in locally advanced rectal cancer?** (259) U
   A. Reducing local recurrence
   B. Improving survival
   C. Maximizing the conversion of the rectal tumor to operability
   D. Increasing the resection limit in low rectal cancer
   E. Improving the functional result

26. **Which of the following is NOT a pre-cancerous state of gastric cancer?** (263) U
   A. Atrophic chronic gastritis
   B. Gastric polyps
   C. Gastric ulcer
   D. Duodenal ulcer
   E. Hypertrophic gastritis

27. **Which of the following is NOT a complex radical surgery of gastric cancer?** (270) U
   A. Gastro-colectomy
   B. Gastrectomy associated to the excision of the left hepatic lobe
   C. Upper polar gastrectomy
   D. Gastrectomy associated with oophorectomy
28. The following are strict contraindications of the conservatory treatment of breast cancer, with the EXCEPTION of? (279) U
   A. Two or more tumors in the separated breast quadrants
   B. Diffuse micro-calcifications
   C. Macromastia
   D. Breast radiotherapy in for patients with history
   E. 1\textsuperscript{st} and 2\textsuperscript{nd} quarter of pregnancy

29. The following are the advantages of medical ultrasound in breast cancer, with the EXCEPTION OF: (275) U
   A. It is non-invasive
   B. It is without pain
   C. No density differences are detected
   D. Offers real time images
   E. Low costs

30. A breast cancer patient in the 3A stage, according to the TNM classification, has: (277) G
   A. T2 N1 M0
   B. Tis N0 M0
   C. T3 N1 M0
   D. T4 N2 M0
   E. T4 N3 M0

31. These are the objectives of the conservative treatment of breast cancer, with the EXCEPTION of: (279) U
   A. Similar survival rate with the one after mastectomy
   B. Local control of the disease
   C. Collecting information for the prognosis evaluation
   D. Good esthetic outcome
   E. It is indicated in the 3\textsuperscript{rd} stage

32. The efficiency of respiratory motions in thoracic traumatisms are evaluated as follows, with the EXCEPTION of: (286) U
   A. Estimation of the amplitude of thoracic wall excursions
   B. Estimation of the present of paradoxical movements
   C. Presence of plagues
   D. By the presence of the thready pulse
   E. Estimation of the character of the thoracic wall excursions

33. The indications of the surgical treatment in thoracic traumatisms are: (288) U
   A. Hemorrhage
   B. Severe lesions of airways
   C. Lesions of the heart
   D. Lesions of the esophagus
   E. All of the above
34. Which statement is TRUE regarding simple rib fractures? (289) M
   A. The posterior costal arch is usually of concern
   B. The most exposed ribs are the upper ones, 1st-4th
   C. The treatment consists in minor analgesics and respiratory physical therapy
   D. The paradoxical respiration is encountered in simple costal fractures
   E. The treatment consists in internal fixing by costal osteosynthesis

35. Which statement is FALSE regarding hemothorax? (291) U
   A. It is an accumulation of air in the pleural cavity
   B. Occurs following thoracic contusions or plagues
   C. Intercostal vessels are injured in most cases
   D. The treatment consists in thoracostomy and aspiratory pleural drainage in the massive hemothorax
   E. The immediate consequence of blood accumulation in the pleural cavity is lung collapsing

36. Which statement is FALSE regarding pulmonary ruptures? (292) M
   A. They are generated by fractured ribs, melee weapons or bombshells
   B. Most of the cases are accompanied by pleural rupture with hemopneumothorax picture
   C. They may occur by the sudden increase of pressure on the airways
   D. The concomitant rupture of some pulmonary bronchioles and veins determines a gaseous embolism
   E. The treatment is aimed to eliminate pain, active respiratory physical therapy and stimulation of cough and expectorations with ventilating support

37. Which statement is FALSE regarding the lesions of the thoracic duct? (294) M
   A. They are accompanied by vertebral lesions
   B. Lymph in mediastinum is rapidly accumulated
   C. After repeated discharge thoracenteses, protein-caloric malnutrition occurs as well as immunological disorders
   D. The pleural fluid is milky, viscous with an alkaline pH
   E. Surgery is needed in persistent lymphorrhagia

38. These are the conditions with immediate vital risk in thoracic traumatisms that have to be estimated at the place of the accident or in the emergency unit, with the EXCEPTION of: (296) M
   A. Soft thorax
   B. Cardiac tamponade
   C. Pneumothorax in tension
   D. Gastric ruptures
   E. Obstruction of the airways

39. Which is the FALSE statement regarding the abdominal compartment syndrome? (302) G
   A. It occurs in patients with severe abdominal traumatisms
   B. It is caused by intestinal edema and accumulation of fluids in the peritoneum
   C. It is defined as being the increase of intra-abdominal pressure >40 mmHg
   D. It is associated with an organ dysfunction: heart, lungs or kidneys
E. The diagnosis determines immediate decompression of the abdomen

Multiple choice:

40. Which are the TRUE statements about the paraclinical examinations in acute appendicitis? (168)
   U
   A. A leukocytosis exceeding 20,000/mm³ is a sign of perforation
   B. The urinary sediment is useful for excluding a renal disease
   C. A leukocytosis of about 10,000/mm³ with lymphocytosis is characteristic for acute appendicitis
   D. In the presence of typical symptomatology, image explorations are not needed
   E. Typically, the patients have leukopenia (<4000/mm³)

41. Which are the FALSE statements regarding the treatment of acute appendicitis? (170) M
   A. The appendicular block is a surgical emergency as surgery is needed in the first 48 hours
   B. It can be made both classical and minimally invasive
   C. The intervention implies highlighting the appendix base, ligature of the mesentery and ligature plus sectioning of the appendix
   D. The classical approach is preferred compared to the laparoscopic approach with many advantages
   E. The appendicular abscess can be treated by surgical or ultrasound guided drainage

42. Which are the TRUE statements regarding the clinical manifestations of acute appendicitis? (168)
   U
   A. Constipation is more frequent than diarrhea
   B. Tremble and fever of over 38° are characteristic in the catarrhal form
   C. Tachycardia is proportional with the severity of the infection and the temperature
   D. Anorexia is a tardive, non-specific sign
   E. Pain is continuous

43. Which are the FALSE statements regarding the treatment of vesicular lithiasis? (179) M
   A. It has an operatory indication even under the conditions of a minimal symptomatology due to the evolutorial potential
   B. The laparoscopic method is unanimously accepted as the “golden standard” of this intervention
   C. The severe cardio-respiratory diseases may be a contraindication of laparoscopic intervention
   D. Acute cholecystitis with extended inflammatory modifications is an essential indication of emergency laparoscopic surgical treatment

44. Which are the TRUE statements regarding clinical manifestations of vesicular lithiasis? (173) U
   A. Painful episodes occur at small time periods, the onset of a new colic overlapping the end of the previous one (subintraent biliary colic)
   B. The patients signals the present of morning bitter taste
   C. Bloating is accompanied by abdominal pains with continuous character
   D. Epigastric pain radiating in the left hypochondria
   E. The presence of Charcot’s triad is suggestive for an obstructive complication obstructing the main bile duct
45. **Which of the following statements regarding imagistic explorations related to vesicular lithiasis are TRUE?** (174) M
   A. Abdominal ultrasound is the essential exploration for diagnosis
   B. With the help of abdominal radiography we can make a differential diagnosis with right renal lithiasis: renal calculi are projected anteriorly to the spine and the vesicular calculi are projected posteriorly to the spine
   C. Cholangiography consist in examining the opacified biliary ways by the presence of a contrast substance
   D. Biliary scintigraphy with Technetium provides an anatomical and functional evaluation of the liver, bile ducts, gallbladder and duodenum
   E. CT and MRI represent the chosen methods in diagnosing vesicular lithiasis

46. **Regarding acute cholecystitis, the following statements are TRUE:** (178) M
   A. Pain with permanent character with overlapping of peritoneal irritation signs
   B. Fever (38-38.5°C) and tremble are the expression of the septic state
   C. Leukocyte increase (10.000-12.000/mm³) is characteristic
   D. Value of transaminases increase to over 1000 units
   E. Surgical treatment has an emergency character

47. **Which are the TRUE statements regarding the biliary ileus?** (178) M
   A. It is a complication frequently occurring in elderly
   B. It is caused by the migration of a voluminous calculus in the duodenum via a newly formed cavity (bilio-digestive fistula)
   C. Abdominal radiography highlights hydro-air images
   D. The treatment is represented by 2 operative times: extraction of the calculus by longitudinal enterotomy and closing of the bilio-digestive fistula
   E. The migration of a calculus at the level of the ileocecal valve may generate an upper intestinal occlusion

48. **Regarding CBP vesicular lithiasis, which of the following statements are TRUE:** (181) U
   A. More frequent than the autochthonous one
   B. The calculi have a firm consistency, they are round, faceted, identical with those found in the bile reservoir
   C. The small vesicular calculi reach the transcystic CBP and if they are not discharged in the duodenum, they cause the occurrence of mechanical icterus
   D. The large calculi may reach the CBP level via a bilio-digestive fistula
   E. In case of some parasite diseases, intra-hepatic calculi may form

49. **The differential diagnosis of CBP lithiasis can be done with:** (183) U
   A. Acute hepatitis
   B. Vater’s ampulloma
   C. Acute appendicitis
   D. Extra-uterine pregnancy
   E. Icterus of the cephalopancreatric neoplasm
50. **What are the cholangiographic criteria certifying the complexity of a lithiasis? (186) U**
   A. Presence of calculi with a diameter <1cm
   B. Presence of panlithiasis
   C. Presence of atonic megacholedochus with a diameter >2cm
   D. Absence of lithiasic relapse
   E. Choledochus cystic dilatation

51. **Regarding the choledochus drainage from CBP lithiasis, which of the following statements are TRUE: (187) M**
   A. Transcystic drainage – via a drain tube passed in CBP, transcystic
   B. Kehr type drainage – a T tube in which the long branch is exteriorized outside the abdominal wall
   C. Axial drainage – exteriorization by transhepatoparietal way of the drainage tube
   D. Transcystic drainage has the following advantages: prevents and fights biliary stasis and infections, treatment of some residual calculi
   E. Kehr type drainage is allowed only for a limited period of time

52. **Reynolds pentad from angiocholitis is characterized by: (184) U**
   A. Continuous pain
   B. Fever 39-40°C
   C. Icterus
   D. Hypertension
   E. Phenomena of hepatic-renal insufficiency

53. **The complications of CBP lithiasis are, with EXCEPTION of: (184) M**
   A. Angiocholitis
   B. Secondary biliary cirrhosis
   C. Acute pancreatitis
   D. Biliary ileus
   E. Acute cholecystitis

54. **Which are the TRUE statements regarding the bilio-digestive anastomoses? (187) U**
   A. They are used in complex lithiases
   B. A bypass is made between a biliary section located upstream from a lesion and the digestive receptor
   C. The bilio-jejunal anastomosis does not use a V shaped loop
   D. The bilio-jejunal anastomosis uses a jejunal loop mounted in V, taken from the digestive circuit, anastomosed at the remaining biliary stub
   E. Choledocho-duodenal anastomosis is not used in the treatment of multiple relapsing lithiasis

55. **Which are the TRUE statements regarding the severe form of acute pancreatitis? (196) M**
   A. It is characterized by unique or multiple organ insufficiencies
   B. The organ insufficiencies persist >48 hours
   C. It is spontaneously remitted
   D. It is characterized by a Ranson criteria greater than 6 points
E. The local complications are frequent and the infected necrosis generate very high mortality rates

56. **Clinically, acute pancreatitis is characterized as follows:** (195) U
   A. Strong epigastric pain is present, increasing to an unbearable intensity and irradiates “in bar”
   B. Nausea, vomit and stoppage of intestinal transit for fecal matter and gas are constantly associated
   C. The intestinal transit for fecal matter and gas is maintained
   D. A diffuse abdominal distension may be observed
   E. In most of the cases, Cullen and Turner sign may be observed

57. **Which are the anatomic-clinical forms of acute pancreatitis?** (191) U
   A. Interstitial edematous acute pancreatitis
   B. Encapsulated necrotic collection
   C. Pancreatic pseudo-cyst
   D. Infected pancreatic necrosis
   E. Necrotic acute pancreatitis

58. **Which are the mechanical factors involved in the etiology of acute pancreatitis?** (190) U
   A. Periampullary tumors
   B. Pancreatic traumatisms
   C. Duodenal obstructions
   D. Alcohol ingestion
   E. Periarteritis nodosa

59. **The enzymatic aggression, via the action of cytokines and other pro-inflammatory factors, triggers the intrapancreatic inflammatory process by:** (190) M
   A. The release of chemotactic factors mobilizes inflammatory cells in circulation
   B. Activation of some adhesion molecules, inflammatory cells adhere to the capillary endothelium
   C. Migration of inflammatory cells in the inflammation area
   D. Activation of macrophages and lymphocytes
   E. Extension of the extrapancreatic inflammatory process which becomes systemic

60. **The TRUE statements regarding the acute necrotic collections within pancreatic and peripancreatic collections are as follows:** (194) M
   A. They develop after the first 4 weeks
   B. Occur in the evolution of necrotic acute pancreatitis
   C. Can be infected
   D. They are clearly differentiated by acute peripancreatic liquid collections in the first week of disease by CTCI
   E. Can be multiple, sometimes multilocular

61. **Regarding the biochemical tests related to acute pancreatitis, which of the following are TRUE:** (195) M
   A. Serum amylases and lipases are increased
B. The relations between serum enzyme values and the severity of pancreatic are closely related.
C. Increased bilirubin and ALT values <3 times than normal values suggest the biliary cause of the pancreatitis.
D. Reactive C protein with values >150 mg/l, after 36 hours since onset determines the severe form of pancreatitis.
E. Reactive C protein allows the monitoring of the inflammatory process evolution.

62. These are the CTCI aspects related to acute pancreatitis, with the EXCEPTION of: (196) U
A. Volume increase of the pancreas by edema
B. Homogenous capture of the contrast
C. Drawing “in strands” of the peripancreatic tissues
D. Peripancreatic liquid collections
E. CTCI cannot offer information regarding the etiology of acute pancreatitis.

63. The treatment of the mild forms of acute pancreatitis consists in: (198) U
A. Volemic rebalance
B. Prophylactic antibiotic therapy
C. Control of glycaemia (normally to patients without diabetes) which is normalized in the first 24 hours since onset
D. Administration of O2 maintaining the saturation Hb>95%
E. Control of pain and support of vital functions.

64. The treatment of severe acute pancreatitis in tardive phase is characterized as follows: (200) M
A. Surgical treatment is not advised in the first 48 hours since onset
B. The standard for infected pancreatic necrosis is broad spectrum antibiotic therapy
C. In the presence of infection of pancreatic necrosis, debridement and drainage are necessary
D. Persistent pancreatic-cutaneous fistulas after the external drainage of collections can be surgically solved at 4-6 months since formation by the anastomosis between the fistula and Roux-en-Y jejunal loop
E. In the approach alternative in successive stages, a percutaneous drainage is done first and then antibiotic therapy.

65. Which are the TRUE statements regarding the Ranson criteria? (197) M
A. It evaluates the pancreatic severity at admission to hospital and after 48 hours
B. A criteria less than 2 means a mild form
C. The calculation of the basic deficiency is useful and it is used at admission to hospital
D. A criteria between 2 and 6 means a severe form of the disease
E. Serum Na is an element calculated at 48 hours since admission to hospital.

66. Which of the following statements regarding the multiple organ dysfunction syndrome (MODS) within severe acute pancreatic are TRUE: (192) M
A. Pulmonary dysfunction occurs tardive in the disease
B. Renal lesions are produced by ischemia and inflammation
C. Metabolic and hepatic synthesis dysfunction are in the early stage
D. CNS impairment is manifested by conscious state perturbations leading to coma
E. Myocardium dysfunction is more severe when there are no pre-existing cardiac diseases.
67. **Which are the vascular/immune etiological factors involved in the appearance of acute pancreatitis?** (190) U
   A. Deficiency of α1-antitrypsin
   B. Sjögren Syndrome
   C. Periarteritis nodosa
   D. Epidemic parotitis
   E. Hyperlipemia

68. **The emergency differential diagnosis of acute pancreatic is NOT done as follows:** (195) U
   A. Entero-mesenteric infarction
   B. Gastric or perforated duodenal ulcer
   C. Acute appendicitis
   D. Renal colic
   E. Lower myocardium infarction

69. **Compensation of vital functions within the treatment of peritonitis is carried out as follows:** (214) M
   A. Making the digestive tube idle
   B. Via plasma and blood transfusions
   C. By preventing and fighting acute respiratory insufficiency
   D. By administration sufficient large concentrations of antibiotic for eliminating the conditions specific to the intraperitoneal micro-environment
   E. Electrolytic rebalance is not useful

70. **In the initial phase of peritonitis, in immuno-competent patients or in localized peritonitis, the following antibiotics can be used:** (215) G
   A. Ampicillin
   B. Moxifloxacin
   C. Ticarcillin- clavulanic acid
   D. Tigecyclin
   E. Ertapenem

71. **Which are the FALSE statements regarding tertiary peritonitis?** (212) M
   A. It is diffused and persistent
   B. The inflammatory response depends on the pathogenicity of germs
   C. The body cannot regulate the inflammatory cascade
   D. It occurs after the superinfection of the liquid by ascites
   E. It is accompanied by muscular contractures and clinical and radiological pneumoperitoneum

72. **Which are TRUE statements regarding peritonitis by colon perforation?** (211) U
   A. One of the most severe forms of peritonitis
   B. Can be a consequence of a local perforation
   C. Can be of diastatic cause
   D. Can be localized at the pelvis level
   E. Diastatic perforation is found most frequently at the level of the descendent colon
73. Which of the following statements regarding the ionogram of the patient with peritonitis are TRUE: (208) G
   A. It is not modified
   B. Presents hypokalemia, hyponatremia, hyperchloremia
   C. Presents hypokalemia, hyponatremia, hypochloremia
   D. Hypokalemia and hyponatremia occur following dehydration and vomit
   E. Hyponatremia occurs following liquid losses in the Randal 3rd section

74. Which are the TRUE statements regarding the symptomatology of peritonitis? (206) U
   A. Hiccup occurs tardive by phrenic irritation and hydro-air distension of the stomach
   B. Digestive hemorrhage is frequently encountered at onset
   C. Vomits are rare, initially bilious, subsequently vomit of food
   D. Diarrhea is a consistent sign in peritonitis
   E. Inconstant stoppage of transit for fecal matter and gas

75. Which are the TRUE statements regarding abdominal palpation in peritonitis: (207) U
   A. Muscular defense can be underlined, an initial sign that can be replaced in the evolution of abdominal contraction
   B. Abdominal contraction is a sign of great diagnosis value
   C. Cutaneous hyperesthesia is rarely present
   D. Blumberg maneuver consists in sudden painful decompression of the abdominal wall
   E. Abdominal contraction may be absent in some cases in elderly who are under antibiotherapeutic or morphine treatment

76. Which of the following are disorders of the surgical acute abdomen? (212) U
   A. Acute pancreatitis
   B. Entero-mesenteric infarction
   C. Atraumatic hemoperitoneum
   D. Splenic thrombophlebitis
   E. Periarteritis nodosa

77. In acute peritonitis, the following antibiotic associations are advised: (215) G
   A. Cefuroxim + Metronidazol
   B. Ciprofloxacin + Metronidazol
   C. Ertapenem + Metronidazol
   D. Cefazolin + Metronidazol
   E. Levofloxacin + Metronidazol

78. Hemoleucogram in peritonitis may highlight the following: (208) M
   A. Leukocytosis >12,000/mm³
   B. Below 10% immature forms on the peripheral blood smear
   C. Leucopenia is the expression of medullary insufficiency
   D. False normal values of hemoglobin and hematocrit
   E. VSH and reactive C protein are usually low
79. **Which are the clinical forms of occlusions by obstruction?** (222) U
   A. Strangulated groin hernia
   B. Sigmoid volvulus
   C. Biliary ileus
   D. Occlusion by left colon cancer
   E. Strangulation

80. **Regarding the sigmoid volvulus the following are true with the EXCEPTION of:** (223) M
   A. Has a sudden onset with sub-occlusive crises in those with a history
   B. Abdomen asymmetry is observed, the left half being more loose
   C. It involves the existence in those with history of an abdominal surgery
   D. Rigler’s triad is observed: pneumomobilia, loose loop, opaque ectopic calculi
   E. It is a major complication of intestinal obstructions.

81. **Which are the severity signs of intestinal occlusions?** (220) U
   A. Altered general state
   B. Sepsis
   C. Intense pain
   D. Nausea and vomit
   E. Cutaneous hyperesthesia

82. **Regarding occlusions by strangulation, which of the following are TRUE:** (223) M
   A. Strangulated eventrations have a higher frequency in women
   B. The presence of real, continuous pain at the hernia level with sudden character, with the impossibility to produce hernia mass
   C. In the absence of treatment, the presence in the hernia sac of a strangulated intestinal section may lead to the loop necrosis in 24-48h
   D. They have a delayed operatory indication
   E. Constant stopping of intestinal transit for fecal matter and gas

83. **Without treatment, simple mechanical occlusions of the small intestine can be complicated by:** (226) M
   A. Diastatic perforations
   B. Peritonitis
   C. Cardiogenic shock
   D. Necrosis
   E. Exacerbation of hypovolemic shock

84. **The parietal causes of a mechanical intestinal occlusion are:** (219) U
   A. Enteritis
   B. Anal imperforation
   C. Invagination
   D. Diverticulitis
   E. Ring shaped pancreas
85. Clinically, intestinal invagination is characterized by: (224) U
   A. Stopping of transit for fecal matter and gas
   B. Paroxysmal abdominal pain
   C. Rectal touch in invagination may highlight fresh blood on the examiner’s finger
   D. Twisting of intestine around its own axis, totally or partially
   E. Radiological examination shows a loop with two hydro-air levels, “bird beak” shaped

86. Regarding laboratory tests within HDS, which of the following statements are TRUE: (230) M
   A. A hematocrit <30% shows severe anemia
   B. Coagulogram is important for highlighting the coagulation disorders of various causes
   C. A ratio greater than 36 between urea and creatinine, in a patient with renal insufficiency, is suggestive for HDS
   D. Hypoglycemia may be present by suprarenal compensatory mechanism in shock
   E. Determination of stool hemorrhages is a screening test for lower digestive hemorrhages and pancreatic cancer

87. Massive digestive hemorrhage is defined as follows: (230) G
   A. When bleeding is accompanied by shock or orthostatic hypotension
   B. Hematocrit value between 30-35%
   C. Replacement of more than 50% of the blood volume in 3 hours or less
   D. A blood transfusion necessary greater than 150 ml/min
   E. Transfusion of ≥10 blood units in 24 hours

88. A patient of 54 years old has hemorrhages at the level of the upper digestive tract. In endoscopy, a mesh like continuous bleeding is observed at gastric level (according to Forrest classification, the patient has): (231) G
   A. A 2a type bleeding
   B. A 2c type bleeding
   C. A mortality rate of 11%
   D. A 1b type bleeding
   E. An incidence of re-bleeding >50%

89. Who are the patients with a high risk of massive HDS, in need of admission to intensive care and in need of carrying out emergency diagnostic/therapeutic endoscopic maneuvers? (232) M
   A. Patients with secondary bleeding, associated to other diseases
   B. Patients with active hemorrhage signs
   C. Patients of over 60 years of age
   D. Hemodynamic stable patients
   E. Patients with various associated minor comorbidities

90. Which are the objectives of therapeutic endoscopy within HDS? (234) U
   A. Stratification of bleeding risk
   B. Control of active hemorrhage or high risk lesions
   C. Treatment of a persistent or relapsing hemorrhage
   D. Bleeding identification and localization
E. Carrying out a multiple biopsy on the edges of a gastric ulcer

91. Which of the following are NOT criteria of a favorable prognosis in a upper digestive hemorrhage: (234) U
   A. Below 75 years of age
   B. Absence of ascites
   C. Gastric aspiration with fresh blood after one hour since presentation
   D. High prothrombin time
   E. Absence of concomitant unstable diseases

92. The strict contraindications of nasogastric intubation in patients with HDS are: (234) U
   A. Severe traumasims of the face
   B. Esophageal varicose and strictures
   C. Recent nasal surgery
   D. Cranial base fracture
   E. Ingestion of caustic substances.

93. The relative indications of surgical treatment in the hemorrhage of gastro-duodenal ulcers are the following: (236) M
   A. Old age
   B. Refusal of transfusion
   C. Rare blood type
   D. Failure of endoscopic treatment
   E. Reduced but persistent bleedings needing more than 3 blood units per day

94. Which are the major aspects in preventing and treating esophageal varicose? (237) U
   A. Prediction of risk patients
   B. Treatment of active hemorrhage
   C. Prevention of re-bleeding (primary prophylaxis)
   D. Making of portosystemic surgical shunts
   E. Making of intrahepatic portosystemic trans-jugular shunt

95. The resuscitation of the patient with HDS in emergency cases includes: (238) M
   A. Correction of coagulopathy and thrombocytopenia
   B. Careful monitoring of sepsis signs and prophylactic administration of antibiotics to high risk patients with ascites
   C. Hemostasis by plugging
   D. Administration of Octreotid
   E. Providing the digestive tract evacuation

96. The contraindications of the intrahepatic portosystemic trans-jugular shunt are the following: (240) M
   A. Severe congestive cardiac insufficiency
   B. Polycystic liver
   C. Hydrothorax
   D. Severe pulmonary hypertension
97. **Which are the major risk factors for clinically significant hemorrhage due to stress ulcer?** (240) M
   A. Burns of over 35% of the body surface
   B. History of gastro-duodenal ulcer
   C. Mechanical ventilation of more than 48 hours
   D. Cranial and spine traumatisms
   E. Coagulopathy

98. **Regarding the Dieulafoy lesion, which of the following statements are TRUE?** (242) M
   A. It is caused by an aberrant sub-mucous artery
   B. It is characterized by relapsing gastric hemorrhages
   C. Definitive treatment is surgical resection
   D. Stopping of hemorrhage is possible only by embolization
   E. It is made up of multiple widened sub-mucous blood vessels

99. **Which of the following are inflammatory causes of lower digestive hemorrhage?** (243) U
   A. Hemorrhoids
   B. Enteral infarction
   C. Ulcerative-hemorrhagic rectocolitis
   D. Rectal tumors
   E. Crohn disease

100. **Which are the TRUE statements regarding occult and obscure digestive hemorrhages?** (244) M
    A. Obscure hemorrhage is a low intensity hemorrhage with known origin
    B. Occult hemorrhage is usually objectivized at routine examinations
    C. Surgical treatment is not necessary
    D. Obscure hemorrhage is defined as a unknown hemorrhage persisting after an initially negative endoscopy
    E. If the source of bleeding cannot be traced, the patient will be treated for iron-deficiency anemia

101. **The therapeutic options in hemorrhagic varicose are:** (237) M
    A. Plugging of varicose with Sengstaken-Blakemore tube
    B. Portosystemic surgical shunts
    C. Plugging of varicose with Linton-Nachlas tube
    D. Sclerotherapy
    E. Surgical treatment by elastic ligature or application of hemoclips

102. **A patient of 55 years old is brought to the hospital in an emergency case suffering from hematemesis. At the endoscopic examination, a gastric ulcer is observed at the base of which hematine is present. The patient is conscious with major comorbidities. According to Rockall’s classification, the patient has:** (233) G
    A. A low rate of HDS relaps and a low mortality
    B. A score of 1 point
    C. A score of 3 points
D. An unfavorable evolution needing the prophylaxis of the hemorrhagic relapse
E. The need of a continuous monitoring in intensive care

103. **Which are the useful imagistic investigations in HDS?** (231) U
   A. Doppler abdominal ultrasound
   B. Angiography
   C. Computerized tomography with contrast substance
   D. Simple thoracic radiography
   E. Invertography

104. **Which of the following represent symptoms characteristic to colorectal cancer?** (252) U
   A. Rectal bleeding
   B. Abdominal pain
   C. Early satiety
   D. Modification of intestinal transit
   E. Tenesmus

105. **Screening in colorectal cancer is advised in the following cases:** (254) U
   A. To people of over 60 years of age
   B. To people with a family history of CCR
   C. To people suffering from ulcerative-hemorrhagic rectocolitis
   D. To people with irritable colon syndrome
   E. In family polyposis

106. **Regarding carcino-embryonic antigen (ACE), which of the following statements are TRUE:** (254) M
   A. It is a routine analysis of people with a medium risk for developing colorectal cancer
   B. It is a prognosis factor with patients with CCR
   C. ACE >10 ng/ml is correlated with a reduced survival rate
   D. ACE has no value in detecting early CCR
   E. ACE has no value in differentiating non-operable and operable tumors

107. **Regarding to the TNM classification of CCR, the following are true, with the EXCEPTION of:** (255) M
   A. T1 is the tumor protruding the muscularis mucosae and invades the sub-mucosa;
   B. T4 is the tumors invading the sub-serosa or the subperitoneal perirectal tissue;
   C. N1b generates metastasis in 4-6 regional lymphatic ganglions;
   D. M1 is remote metastasis;
   E. TNM staging includes 4 stages depending on those 3 parameters (T, N, M).

108. **Severity signs caused by CCR occlusion are:** (257) U
   A. Muscular defense
   B. Pain
   C. Fever
   D. Absence of transit for fecal matter and gas
   E. Postprandial early vomit with food content
109. **Chemotherapy in CCR is advised in the following cases:** (258) M
   A. In the early stages of the disease
   B. If the tumor is N+ (3rd stage)
   C. If other negative prognosis signs are present favoring recurrence
   D. If vascular or perineural invasion exists
   E. If there is a high differentiation degree

110. **Which are the TRUE statements regarding surgical interventions in colorectal cancer?** (258) M
   A. For right colon tumors, a right hemicolectomy is made with a manual or mechanical ileocolonic anastomosis
   B. For left colon cancer localized in splenic angle, an upper left section colectomy is carried out with colocolic anastomosis between the transversal colon and the descendent colon
   C. For descent colon, a right hemicolecotmy is made
   D. For cancers localized at the level of the sigmoid colon, a lower left colectomy is made as well as a termino-terinal colorectal anastomosis at the level of the 2nd sacral vertebra
   E. For descendent colon tumors, the lower mesenteric artery is ligatured at the origin from the aorta

111. **Which are the TRUE statements regarding the rectal cancer treatment?** (258) G
   A. The pre-operatory radiotherapy is advised for subperitoneal rectal neoplasm for T3-T4 and/or N0 or N+ tumors
   B. The distal resection limit in rectal cancer is 5 cm
   C. The minimally invasive approach in rectal cancer allows the visualization with ease of nervous plexures thus preserving the anal sphincter
   D. The high ligature of vascular pediculi is reserved only in carefully selected cases
   E. Surgical intervention beings by exploring the abdominal cavity searching for signs of peritoneal carcinomatosis

112. **Which are the TRUE statements regarding the local-regional evaluation in colorectal cancer?** (253) U
   A. Rectal touch may detect and evaluate tumors located at maximum 5 cm from the dentate line
   B. Colonoscopy is the most adequate method in discovering lesions localized at rectal level
   C. The characteristic imagistic aspect of barium enema in colorectal cancer will be the presence of stenosis, niche or lacunae
   D. When the tumor is circumferential the characteristic aspect of “apple core”
   E. Endorectal ultrasound may assess the parietal infiltration degree of the rectal tumor located below 8 cm of the anal edge

113. **Which are the TRUE statements regarding the gastric malign niche?** (265) M
   A. Large size
   B. Narrow communication pediculus
   C. Deformation of gastric wall around the niche
   D. Cancerous niche is drawn outside the external line of the gastric profile
E. Cancerous niche is within the external line of the gastric profile

114. **Regarding the classification of the varied macroscopic endoscopic aspect of the early gastric cancer, which of the following statements are TRUE:** (265) M
   A. Type 1 is superficial with a pure infiltrative form
   B. Type 2C is depressed or eroded consisting in the shallow depression of the mucosa
   C. Type 2A is elevated, it appears as a bulge in the plateau, with a height less than double of the gastric mucosa
   D. Type 3 is protrusive as a papillary or polyploidy excrescence
   E. Type 3 differs from type 2C only by the lesion’s depth

115. **Which are the TRUE statements regarding the serological investigation of gastric cancer?** (266) G
   A. The increase of plasmatic ACE in operated patients has a diagnosis significance for local relapse
   B. Hypochromic, microcytic anemia is encountered in patients suffering at the same time from Biermer disease
   C. Increase of IgM and haptoglobin is observed
   D. A leukocytosis of 10.000-15.000/mm³ is present
   E. Macrocytic anemia determined by chronic occult hemorrhages

116. **Surgical treatment is not advised in gastric cancer in the following cases:** (268) M
   A. Ascites
   B. Right supraclavicular ganglions
   C. Presence of obvious metastases
   D. General altered state with cachexia
   E. Sepsis

117. **Which are TRUE statements regarding the radical subtotal gastric resection?** (268) M
   A. If the tumor is juxta-pyloric, 3 cm of the duodenum will be resected under the pylorus
   B. It is the gastric subtotal resection entirely and remotely removing the tumor process
   C. The spline is always removed irrespective of the tumor stage
   D. Rehabilitation of digestive continuation is carried out by termino-terminal or termino-lateral eso-jejunal anastomosis
   E. Closure of the duodenal blunts is made in the bursa or in double layer suture

118. **Which are TRUE statements regarding bypass surgeries advised in gastric cancer?** (270) U
   A. They are advised in case of very extended gastric cancers which cannot be resected
   B. Represent a curative surgical intervention
   C. For antro-pyloric stenosed tumors, a gastro-entero anastomosis is carried out
   D. For tumors below the cardiac level, esophageal endoprosthesis and food gastrostoma may be used
   E. They are accompanied by the excision of the hepatic left lobe

119. **Regarding TNM staging of gastric cancer, which of the following statements are TRUE:** (267) M
   A. T2 is the cancer invading the serosa
   B. T1 is the limited cancer at the muscularae
C. N2 is the remote invasion of ganglions
D. T4 is the tumor invading the surrounding organs
E. T0 is carcinoma in situ

120. Regarding the radical total gastrectomy which of the following statements are TRUE: (269) M
A. It is the surgery by which the stomach is entirely removed
B. The indications of this intervention are relatively rare and controversial
C. Resection includes the big and small omentum, the spline and all 16 lymphatic ganglion groups
D. Rehabilitation of digestive continuity is made by termino-terminal eso-jejunal anastomosis
E. Rehabilitation of digestive continuity is made by terminolateral eso-jejunal anastomosis

121. Which are the TRUE statements regarding radiotherapy in gastric cancer? (270) M
A. It determines the delay and inhibition of chromosomal modifications and mitoses
B. Gastric cancer needs minimal dosages of radiotherapy, the histological structure being almost always of adenocarcinoma
C. The irradiation doses of 60-70 Gy are well tolerated by the gastric mucosa and the healthy surrounding tissues
D. It proves its utility only as a complementary method to surgery
E. It is the chosen treatment in tumors discovered in early stages

122. Regarding the epidemiology of gastric cancer, which are the TRUE statements: (262) M
A. More frequent in men
B. It is 4th in the ranking of malign tumors regarding frequency
C. The frequency of the disease proportionally increases by age, before the age of 30 is an exception
D. From the point of view of incidence and mortality, Romania ranks mid-table
E. The women/men ratio is 3/1

123. Which are the TRUE statements regarding the management of infra-clinical mammary lesions? (281) M
A. Infra-clinical lesions does not usually exceed 3 cm
B. The limit of lesions depends on the tumor and mammary gland character
C. Surgical excision is the safest method
D. Surgical intervention has both a diagnosis and a therapeutic role
E. The treatment is always accompanied by pre-operative radiotherapy

124. Which of the following are major indications of radiotherapy in breast cancer? (282) M
A. Pre-operative
B. Adjuvant
C. Palliative
D. Hormone stimulating
E. Post-operative
125. Regarding Oncotype DX, used in evaluating the relapse and metastasis risk in breast cancer, which of the following are TRUE: (283) G
   A. It is a genomic test which analyzes the activity of a gene group
   B. It can be used in a carcinoma in situ
   C. It can be used in case of 3rd stage invasive carcinoma
   D. It can be used in case of invasive carcinoma which is negative for the hormonal receptors
   E. The test is based on the study of 5 genes

126. Which are the TRUE statements regarding Paget’s disease of the breast: (283) M
   A. It is a form of lobular cancer
   B. It affects the nipple-areola complex
   C. Leakage at nipple level may be present with a bloody or milky character
   D. Election treatment is represented by chemotherapy
   E. The tumor has an aspect of lobes separated by septa

127. Which are the possible complications of radiotherapy in breast cancer: (283) U
   A. Arm edema
   B. Brachial plexopathy
   C. Decrease of arm mobility
   D. Digestive disorders
   E. Cardiac disorders

128. The synthetic implants used in breast reconstruction after mastectomy are advised in: (280) M
   A. Patients with an important associate comorbidity
   B. Patients with less analog tissue for reconstruction
   C. Patients especially requesting synthetic implants
   D. Young patients
   E. Patients with bilateral breast cancer

129. Regarding the surgery of mammary glands, which of the following statements are TRUE: (278) M
   A. By Patey’s technique, both pectoral muscles are preserved
   B. Modified radical mastectomy is the main technique used
   C. The element differentiating surgical techniques is the way in which the axillar and interpectoral lymphadenectomy is made
   D. By Madden’s technique, the small pectoral muscle is resected
   E. In most of the cases an aspiration post-operator drainage is carried out

130. A woman of 41 years old is diagnosed with T1b N0 M0 breast cancer. According to TNM classification of breast cancer, the patients has: (277) M
   A. A tumor of 15 mm diameter
   B. Invasion of subclavicular ganglions
   C. A tumor of 7 mm diameter
   D. Invasion of internal mammary ganglions
   E. Absence of remote metastasis
131. Which of the following are exogenous risk factors in the occurrence of breast cancer? (274) U
A. The estrogen administrated in high dosage, for a prolonged period of time
B. Administration for a period longer than 10 years of oral contraceptives in young women
C. Substitution hormonal medication in post-menopause
D. First birth at old age
E. The interval between menarche and menopause – the longer the interval, the higher the risk

132. Which are the TRUE statements regarding the imagistic used in breast cancer: (275) M
A. MRI is a technique with the highest sensitivity used in young persons with a denser structure of the mammary gland
B. Galactography is the mammography after injecting a radio-opaque substance in the galactophore ducts
C. Digital mammography may use a wider range of exposures so that the small differences between 2 tissues become obvious
D. The anomalies of malign tumor can be highlighted by using metabolic tracers marked with emitters of positrons
E. The resolution of tomographic images is higher than the one obtained by mammography

133. The surgical treatment of hepato-biliary lesions is accompanied by the following post-operative complications: (303) U
A. Hepatic necrosis
B. Biliary fistulas
C. Biliary ileus
D. Perihepatic biliary collections
E. Haemobilia

134. Regarding the utero-annexial traumatisms, which of the following are TRUE: (309) U
A. The lesions of the uterus in pregnant women are more rare than lesions of non-pregnant uterus
B. Abortion or premature birth are frequent and are caused after a short time after accident
C. The rupture of the pregnant uterus is characterized by severe intraperitoneal hemorrhage
D. The diagnosis is made based on radiological examinations followed by peritoneal puncture
E. Postpartum or post-abortion hemorrhage determines uterine curettage and the administration of oxytocin

135. Which of the following statements are TRUE regarding renal traumatisms? (307) U
A. The lesions of renal pediculus are the rarest renal traumatisms
B. Hematuria is the most consistent symptom
C. The avulsion of renal pediculus is manifested by hypovolemic shock and the occurrence of a mass increasing rapidly in volume on the flanks
D. In case the patient is not hemodynamically stable or has major renal lesions at CT, a conservative treatment is advised
E. In extreme cases, nephrectomy can be carried out with “ex vivo” renal reconstruction

136. Which of the following statements are TRUE regarding ureteral contusions? (308) M
A. They cannot evolve in necrosis
B. Scar healing does not lead to stenosis
C. Treatment consists in debridement of devitalized tissues with suture protected by ureteral silicone tutor tube
D. In lesions of the middle ureter, vesical reimplantation is made by an anti-reflux technique
E. In extended lesions, a ureteroplasty can be made with ileal loop

137. **The treatment of open pelvic fractures needs:** (307) M
A. Open drainage
B. Bone stabilization by osteosynthesis or external fixing devices
C. Distal derivative colostomy
D. Urinary drainage by vesical catheter or cystostomy
E. Wide debridement of devitalized tissues

138. **Which of the following statements about large vessel lesions are TRUE?** (305) M
A. Central retroperitoneal hematoma between the lateral edges of kidneys and parietocolic gutters
B. Lateral retroperitoneal hematoma between the medial edges of kidneys from the diaphragmatic hiatus to the aorta bifurcation
C. Diagnosis is made by abdominal CT with urographic time and contrast
D. The plagues caused by melee weapons or shooting are directly explored via routine surgery
E. In rectal or vaginal touch, bulging of perirectal or perivaginal tissues may be detected

139. **Which of the following statements are TRUE regarding the paraclinical investigations of abdominal traumatisms?** (299) M
A. Computerized tomography is the standard examination in severe abdominal traumatisms
B. The ultrasound examination is immediately carried out in the Emergency Unit in 3 incidences: standard, right and left hypochondria, respectively pelvis (FAST)
C. The simple abdominal puncture or lavage-puncture guided by ultrasounds is the most useful in case of internal bleeding
D. Explorative laparotomy is advised in all cases in which the suspected visceral lesion cannot be otherwise objectivized
E. Simple abdominal radiography is the first investigation as it is the most sensitive to exploration

140. **Regarding thoracotomy of resuscitation, which of the following are TRUE:** (288) G
A. It is carried out in the emergency unit by incision at the level of the left intercostal 4th space
B. In major pulmonary bleedings, the pulmonary hilum is clamped
C. In embolisms, air from aorta is discharged and cardiac plagues are temporarily sutured
D. It is a heroic therapeutic measure applied to patients who cannot be stabilized until reaching the surgery room
E. The results of resuscitation thoracotomy are a reserved prognosis in plagues caused by melee weapons
141. **Regarding the severity of lesions and hemorrhage of surgical treatment in thoracic traumatisms, which of the following statements are TRUE:** (288) G
   A. The severity of hemorrhage can be assessed by measuring the drainage on the thoracostomy tube
   B. Thoracotomy is advised to an initial hemorrhage < 800 ml
   C. A continuous gaseous aspirate with the impossibility of making current normal volumes and to expand to the entire lung means severe lesions
   D. The presence of esophagus or gastric content on the drainage tube implies the need of surgical intervention
   E. In emergency cases, the most recommended therapeutic method is video assisted thoracoscopy (VATS)

142. **Which of the following statements are TRUE regarding the sternal fractures?** (289) M
   A. They are usually comminuted
   B. They are represented by intensive, spontaneous pain also on palpation
   C. They can be accompanied by local hematoma and ecchymosis
   D. In fractures with displacement, the treatment is analgesic, antibiotic and observational

143. **Which of the following statements are TRUE regarding flail chest?** (290) M
   A. Paradoxical respiration can be present
   B. Pendulum respiration is the increase of the dead respiratory space and the decrease of effective ventilation due to the vicious air swinging between the 2 lungs
   C. Mediastinal balance can be present
   D. Flail chest is rarely accompanied by pulmonary contusion
   E. Flail chest has motions in the direction of the thorax and are dependent from it

144. **Regarding the suffocating pneumothorax, which of the following statements are TRUE:** (292) U
   A. It occurs in extended pleuropulmonary ruptures
   B. A sudden air accumulation is generated in the pleural cavity
   C. The patient is hectic, cyanotic
   D. The patient has dyspnea with polypnea
   E. Pleural puncture is made in the intercostal 2nd space on the medioclavicular line

145. **In severe pulmonary contusions, the following are described:** (292) M
   A. Decrease of the functional dead space
   B. Shunt
   C. Hypoxemia
   D. Hypocapnia
   E. Unbalances of the ventilation/perfusion ratio

146. **Which of the following statements are TRUE regarding tracheal-bronchial lesions?** (293) M
   A. Most of tracheal-bronchial ruptures is localized near the carina
   B. The pneumomediastinum subsequent to tracheal-bronchial ruptures is manifested by subcutaneous emphysema
   C. Cervical lesions are manifested by hoarseness, stridor, hemoptysis and respiratory obstruction
   D. The diagnosis is made by thoracic radiography in profile and posteroanterior incidence
E. Tracheostomy increases the pressures on the respiratory ways and can be useful.

147. **Cardiac contusions with traumatic infarction are generated by:** (295) U
   - A. Direct myocardium impairment
   - B. Pump insufficiency
   - C. Ventricular aneurisms
   - D. Cardiac tamponade
   - E. Tearing up of the atria

148. **Conditions with immediate vital risk in thoracic traumatisms, needing treatment at the place of accident or in the emergency care unit, are the following with the EXCEPTION of:** (297) U
   - A. Pneumothorax in stress
   - B. Open pneumothorax
   - C. Pulmonary contusion
   - D. Tracheal-bronchial ruptures
   - E. Diaphragmatic ruptures

149. **Which are the TRUE statements about the diaphragm lesions?** (296) M
   - A. The diaphragm ruptures involves more frequently the muscle periphery
   - B. The clinical picture is dominated by the posttraumatic and hypovolemic shock
   - C. The chronic diaphragmatic hernia are preferably resolved by an abdominal approach
   - D. The clinical picture can be represented by intestinal occlusion by strangulating an intestinal loop
   - E. which is intra-thoracically herniated
   - F. The major risk is hemorrhagic complications

150. **Which are the TRUE statements regarding abdominal exploration used in abdominal traumatisms?** (300) M
   - A. It is made via a median xipho-pubic incision
   - B. Hemorrhage is controlled by tamponing with laparotomy fields
   - C. The digestive tube is systematically explored by opening the lesser sac
   - D. After peritoneum exploration, retroperitoneal inspection is carried out
   - E. In retroperitoneum, pancreatic, renal and gastric lesions are sought

151. **The treatment of lesions of abdominal cavity organs is carried out as follows:** (304) M
   - A. In most cases gastric plagues can be sutured
   - B. Multiple and extended intestinal plagues can be treated by sectional enterectomy
   - C. Intestinal plagues with mesenteric lesions with devascularization can be treated by suture
   - D. Rectal lesions are not sutured
   - E. In extended lesions of the colon, colon resections are made followed by primary anastomosis

152. **Regarding the duodenal-pancreatic lesions, which of the following are TRUE:** (304) M
   - A. Plasty with Roux-en-Y excluded loop is made for D1 level lesions
   - B. The conservative treatment is advised in minor lesions without peritonitis signs
   - C. The post-operative complications are many
   - D. For pancreatic tail and body lesions, a total pancreatectomy is carried out
E. The duodenum and pancreas lesions are suggested by the massive edema, steatonecrosis spots and coloration with bile of the retroperitoneum

153. **Which of the following posttraumatic conditions are manifested with a deceiving, weak symptomatology?** (296) M
   A. Myocardium contusion
   B. Obstruction of airways
   C. Diaphragm ruptures
   D. Cardiac tamponade
   E. Massive hemothorax

154. **The treatment of flail chest is made by:** (290) U
   A. Fighting pain
   B. Stimulation of cough and expectoration
   C. Intubation and mechanical ventilation of the patient
   D. Administration of antibiotics and prophylactic glucocorticoids
   E. Fighting hypoxemia by positive end-expiratory pressures (PEEP)

**XIII. UROLOGY**

**Single choice:**

1. **The theories are part of the lithogenesis theories with the EXCEPTION of:** (316)
   A. Theory of organic matrix
   B. Theory of urinary supersaturation
   C. Theory of sedimentation factors
   D. Theory of precipitation nucleus
   E. Theory of crystallization inhibitors

2. **Lumbar pain encountered in renal colic can be, with the EXCEPTION of:** (318)
   A. Sudden onset
   B. Unilateral
   C. Influenced by position
   D. Paroxistic
   E. With descending anteroinferior irradiation

3. **Patients considered “with risk” with renal-ureteral lithiasis may have the following with the EXCEPTION of:** (319)
   A. Nitrated retention
   B. Sepsis signs
   C. Symptomatology rebel to treatment
   D. Oliguria/anuria
   E. Urinary tract infection
4. **Regarding the imagistic investigation in renal-ureteral lithiasis, which of the following statements is FALSE?** (319)
   A. Renal-vesicular radiography highlights radio-transparent calculi
   B. Renal-vesicular ultrasound may highlight radiopaque calculi as well as radio-transparent ones – hyperechoic image
   C. Intravenous urography (UIV) is not made in renal colic
   D. CT examination can be useful for coralliform calculi
   E. Retrograde ureteropyelography (UPR) has as an indication the urographic mute kidney

**Multiple choice:**

5. **Depending on the radiological aspect (on the renal-vesicular radiography) which of the following calculi are radio-transparent?** (316)
   A. Uric acid
   B. 2,8 dihydroxyadenine
   C. Mono- and dehydrate calcium oxalate
   D. Cystine
   E. Those caused by drugs

6. **The following are factors favoring renal-ureteral lithiasis, with the EXCEPTION of:** (316)
   A. Hereditary-collateral history
   B. Acute urinary infections
   C. Environment: low heat and excessive humidity
   D. Female gender
   E. Age: 30-50 years

7. **Which of the following patient groups are NOT considered to have a high relapse risk of renal-ureteral lithiasis?** (317)
   A. Onset before the age of 20
   B. Hypoparathyroidism
   C. Sarcoidosis
   D. Cystinuria (A, B, AB type)
   E. Type 2 renal tubular acidosis

8. **Regarding the symptomatology associated to renal colic, which of the following are FALSE?** (318)
   A. Bilateral lumbar pain
   B. Lumbar pain is influenced by position
   C. Among digestive manifestations we may mention: mechanical ileus, tympanites
   D. It may associate neurological phenomena such as: anxiety
   E. It associates cardiovascular phenomena: bradycardia, decrease of blood pressure

9. **The consequences of the presence of calculi in the urinary tree are NOT represented by:** (318)
   A. Obstruction
   B. Urinary tract infection
   C. Nephrocalcinosis
   D. Type 1 renal tubular acidosis
   E. Metaplasia of urothelium
10. Regarding the imagistic investigations in renal-ureteral lithiasis, which of the following are NOT TRUE: (317)
   A. Isotopic exploration provides cortical images with good resolution in order to allow the morphology of the urinary tract
   B. Ureteropyelography (UPR) is made with Chevassu catheter in which a contrast substance diluted 1:2 with physiological serum is injected
   C. Intravenous urography (UIV) is “the queen of urological explorations”
   D. Renal-vesicular ultrasound provides excellent morphological information
   E. The specificity of renal-vesicular radiography in renal-ureteral lithiasis is of 44-77%

11. The indications of ESWL are: (322)
   A. Calix related calculi
   B. Pyelic calculus with a diameter larger than 3 cm
   C. Lumbar ureteral calculus
   D. When there is an anatomical obstruction distally to the calculus
   E. Ureteral calculi complicated by urinary infections

12. The treatment of renal colic associates: (321)
   A. NSAID
   B. Prednisone in small doses
   C. Antispasmodic
   D. Painkillers
   E. Beta blocker

13. Regarding ESWL, which of the following statements are TRUE: (322)
   A. Essential conditions for use are: the urinary way downstream to the calculus should be free and the kidney to be functional
   B. It is advised in pyelic calculus with a diameter higher than 3 cm
   C. It is contraindicated in uncontrolled urinary tract infections
   D. In case of single kidney it is contraindicated
   E. Complications are in relation with lithiasic load

14. Regarding endourological techniques: NPL and URS, we may state the following, with the EXCEPTION of: (323)
   A. NLP indications: calculus with a diameter less than 3 cm
   B. NLP contraindications: non-correctable coagulopathies
   C. URS indications: lumbar ureteral calculi
   D. NLP is an exploration and/or instrumental treatment method made by a retrograde approach of the kidney
   E. For lower calix renal calculi we need a flexible ureteroscope and a LASER energy source for fragmentation

15. Regarding vesicular lithiasis, the following statements are FALSE with the EXCEPTION of: (324)
   A. It is lithiasis with local etiopathogenesis (organ lithiasis)
   B. Incriminating factors in the etiopathogenesis of primitive lithiasis are: urethra strictures, neurogenic dysfunctions of the gallbladder
   C. The most frequent pathological conditions associated with secondary vesicular lithiasis are: dehydrations of various causes, diarrheic syndromes
D. Clinically, the patient may have interrupted urination or even complete retention of urine
E. Primitive vesicular lithiasis is relatively rare and can occur in children

XIV. ORTHOPEDICS

Single choice:

1. The occurrence of a fracture is related to the following intrinsic factors, with the EXCEPTION of:
   (328)
   A. Bone size and geometry  
   B. Resistance of fatigue or stress  
   C. Direction of action of the causing force  
   D. Energy absorption capacity  
   E. Density

2. From the point of view of the location, 23-A2 fracture is located at the level of: (331)
   A. Humeral diaphysis  
   B. Proximal extremity of tibia  
   C. Distal extremity of radius  
   D. Ulnar diaphysis  
   E. Internal malleolus

3. Regarding the compartment syndrome, the following statements are true with the EXCEPTION of:
   (337)
   A. It is a disorders which may endanger the limb viability  
   B. It occurs by two mechanisms: active vasoconstriction and passive collapse of capillaries  
   C. These mechanisms determine the onset of a muscular hypoxia under the conditions of an aeroobe metabolism  
   D. When the intracompartmental pressure exceeds 30 mmHg, this indicates an inadequate perfusion of tissues and implies a decompression fasciotomy  
   E. The normal value of intracompartmental pressure is about 10 mmHg

4. Which is the FALSE statement regarding the three types of peripheral nervous lesions described by Seddon? (338)
   A. Axonotmesis is a disruption of axons and conjunctive envelopes  
   B. Neurapraxis is defined as a temporary loss of the nerve conduction function  
   C. Neurotmesis is a disruption of axons and conjuctive envelopes  
   D. Axonotmesis is the disruption of axons and myelin sheath but the conjunctive structures of the nerve are maintained  
   E. The injury of axons, endo- and perineurium but with an intact epineurium is a sub-type of the neurotmesis

5. The tardive local complications in the fractures of long bones are as follows, with the EXCEPTION of: (339)
A. Vicious consolidation  
B. Pseudarthrosis  
C. Posttraumatic reflex neuro-algodystrophy  
D. Compartment syndrome  
E. Bone necrosis

6. **Which is the TRUE statement regarding the orthopedic reduction of fractures:** (341)  
   A. It is made in fractures in which movement does not affect the functional outcome (clavicle fractures)  
   B. It is made in fractures with moderate movement in elderly  
   C. It is made on open focal point  
   D. It can be done instrumentally, exercising on the distal fragment reverse motions to those produced by the traumatic force  
   E. Local or regional anesthesia is not advised

Multiple choice:

7. **Osteosynthesis by internal fixation:** (344)  
   A. It is made by passing a wire below the broach ends and its crossing in “8”  
   B. It is advised in spiroid fractures or fracture with intermediary fragment  
   C. It is advised in transversal diaphysis fractures  
   D. It is used in fractures where strong forces of traction exist determined by the muscles inserted on one of the fragments  
   E. It is based on a biomechanical concept in which the traction forces are converted in compression forces

8. **The advantages of the central cord osteosynthesis are:** (346)  
   A. Decrease of surgical aggression  
   B. Observance of periosteal vascularization and fractured hematoma  
   C. Increase of intramedular pressure  
   D. The medullary content enters in circulation  
   E. The possibility of early mobilization together with the resumption of articular movements

9. **The disadvantages of external fixing used in the fractures of long bones are:** (347)  
   A. Risk of infection at the insertion place of broaches or plugs  
   B. Limited stability in certain regions  
   C. Risk of fracture in the insertion place of broaches  
   D. Possibility of onset of articular stiffness  
   E. Removal of endosteal surface and vascularization

10. **The following are general complications of fractures of long bones, with the EXCEPTION of:** (336)  
    A. Fat pulmonary embolism  
    B. Bronchopneumonia  
    C. Disseminated intravascular coagulation  
    D. Compartment syndrome  
    E. Nerve lesions
11. **Vascular lesions generated by pinching of the artery by a bone fragment are within the following severity stages:** (337)
   A. Protrusion into adventitia, making the vascular wall fragile
   B. Incomplete sectioning, with exteriorized or encysted hemorrhage
   C. Complete sectioning, with acute peripheral ischemic syndrome
   D. Intima and media injury, with evolution risk to thrombosis
   E. Injury of the three tunicae, with thrombosis or secondary hemorrhage

12. **Based on trajectory, the complete fractures can be:** (330)
   A. Transverse
   B. Segmental
   C. „Greenstick”
   D. Impacted
   E. Spiral

13. **The local signs of acute peripheral ischemia are:** (337)
   A. Absence or decrease of peripheral pulse compared to the unharmed limb
   B. Pale, cold teguments
   C. Blisters and areas of cutaneous necrosis (early sign)
   D. Muscular pains and paresthesia in the ischemic sector
   E. Passive collapse of capillaries

14. **Regarding the occurrence mechanism of fractures of long bones, the following statements are true with the EXCEPTION of:** (328)
   A. They can occur via direct mechanism
   B. Fractures in the longitudinal axis are caused by mixed mechanisms
   C. Stress fractures occur in case of a normal bone subject to repeated overstressing
   D. Fractures by torsion in the longitudinal axis are caused by direct mechanism
   E. Fractures of pathological bone can occur by forces of normal intensity

15. **Regarding the remodeling stage of the secondary bone healing, which of the following statements are TRUE:** (333)
   A. The main role is represented by the involvement of osteoclasts
   B. It may take several months or even several years
   C. The anarchically located bone trabeculae are replaced by haversian lamellar structures
   D. A matrix is synthetized which creates the necessary conditions for the sedimentation of hydroxyapatite crystals
   E. At the end of the remodeling stage, the central cord canal becomes penetrable

16. **Which are the disadvantages of boring?** (346)
   A. Consolidation via a periosteal callus
   B. Removal of endosteal surface and vascularization
   C. Medullary content protrusion into circulation
   D. Possibility of onset of articular stiffness
   E. Increase of intramedular pressure of 5-10 times
17. **The major indications of osteosynthesis are the following:** (343)
   - A. Orthopedic irreducible fractures
   - B. Fractures with fast consolidation
   - C. Olecranon fractures
   - D. Fractures of forearm bones
   - E. Fractures on pathological bone

18. **Osteosynthesis with plate and screws is advised in:** (345)
   - A. Comminuted fractures of femur diaphysis
   - B. Epiphysis-metaphysis-diaphysis fractures
   - C. Fractures with bone tissue loss
   - D. Pelvis fractures
   - E. Comminuted fractures of femur diaphysis

19. **The disadvantages and complications of gypsum immobilization are given by:** (342)
   - A. Discomfort created by its application on long periods of time
   - B. Circulation perturbation, bedsores, muscular atrophy, osteoporosis
   - C. Loss of fragment alignment by widening of the apparatus together with edema remission
   - D. Prolonged immobilization in bed of patients (4-6 weeks)
   - E. Decubitus bedsores, pulmonary infections, profound venous thrombosis

20. **Regarding continuous traction in orthopedic treatment, which of the following statements are TRUE:** (342)
   - A. It is proximally applied on the fracture focus point
   - B. It can be trans-osseous with broach
   - C. It has the advantage of weekly radiological and clinical monitoring
   - D. It can be cutaneous via a bandage fixed at limb level to which weights can be attached
   - E. When the probability of fragment movements decreases, the extension must be removed and replaced with a functional orthosis

21. **The classification of vascular-nerve lesions based on AO includes the following, with the EXCEPTION of:** (332)
   - A. Absence of vascular-nerve lesions
   - B. Extended segmental vascular lesions
   - C. Circumscribed lesions to a single muscle type
   - D. Combined vascular-nerve lesions including traumatic amputations
   - E. Extended tegument detachment

22. **Which are the TRUE statements regarding the soft callus stage in secondary bone healing?** (333)
   - A. It is formed in the first 6-7 days
   - B. It is characterized by increased vascularity and cellularity at the level of fracture focus point
   - C. A good vascularity leads to the differentiation towards the chondroblastic line and a deficient one towards the osteoblastic line
   - D. Newly formed osteoblasts secrete the organic matrix and in-between the bone fragments a fibrous callus is formed
E. In areas with predominant traction forces, the differentiation is made by fibroblasts

23. **The classification of muscle lesions based on AO includes the following with the EXCEPTION of:** (332)
   A. Muscle defects, tendon tear up and extended muscle contusion
   B. Compartment syndrome
   C. Cutaneous necrosis by contusion
   D. Contusion in the entire tegument thickness with loss of cutaneous substance
   E. Absence of clinically obvious muscle lesions

24. **Palpation in the radial fossa CANNOT detect a fracture at the level of which bone:** (334)
   A. Pyramidal
   B. Scaphoid
   C. Hamate
   D. Pisiform
   E. Capitate

25. **The radiological evaluation of fractures of long bones observes the following rules:** (335)
   A. Two incidences – anteroposterior and laterolateral
   B. Two joints – supra- and sub-adjacent
   C. Two epiphyses – upper and lower
   D. Two examinations – at an interval of no more than 5 days
   E. Two segments – in children, for comparison

**XV. OBSTETRICS-GYNECOLOGY**

**Single choice:**

1. **In the 2nd trimester of pregnancy, prenatal consultancy includes the following, with the EXCEPTION of:** (352) U
   A. Measuring of the mother’s weight, taking into account a progressive and uniform increase
   B. Measuring of uterine fundus height
   C. Date of perceiving the first fetal movements
   D. After 8 weeks of gestation, the frequency and quality of fetal heart beats are noted
   E. Measuring of abdominal circumference

2. **Which of the following are NOT included in the evaluation of the quadruple test:** (354) U
   A. α-fetoprotein
   B. PAPP-A
   C. βHCG
   D. Estriol
   E. Inhibin A

3. **The biopsy of chorial villosities involves the following risks with the EXCEPTION of:** (356) U
   A. Oligohydramnios
   B. Abortion in 0.5-1% of the cases
C. Longitudinal malformations of radial, ulnar limbs
D. Malformations of limbs when the biopsy is made before 14 weeks
E. Oromandibular hypogenesis

4. **The McDonald sign is characterized by:** (360) U
   A. Increase of uterine body mobility compared to the isthmus
   B. Softening of uterine isthmus after 6 weeks of gestation
   C. Softening of the cervix
   D. At uterine palpation, a more pronounced development of a uterine horn
   E. Paste like consistency of the pregnant uterine

5. **Which of the following are positive pregnancy signs:** (359) U
   A. Amenorrhea
   B. Fetus palpation
   C. Presence of active fetal movements
   D. Increase of abdomen
   E. Braxton-Hicks contractions

6. **Which of the following statements regarding screening procedures in cervix cancer is TRUE:** (367) M
   A. Between 21 and 29 years of age, testing once a year is advised consisting in cytological examination and HPV testing
   B. Between 21 and 29 years of age, screening once at 3 year only by cytology is advised
   C. Between 30 and 64 years of age, cytological screening is advised once at 2 years
   D. Stopping of screening is made at 60 years of age
   E. Stopping of screening is made at 60 years of age only in patients with corresponding screening in their history: 2 negative successive examinations

7. **Which of the following paraclinical explorations is indicated to differentiate between leiomyomatosis and adenomyosis:** (374) U
   A. Transvaginal ultrasound
   B. Ultrasound with saline infusion
   C. MRI
   D. Hysteroscopy
   E. Vaginal examination combined with abdominal palpation

8. **The ovarian tumor with granular cells is:** (378) M
   A. A stromal tumor
   B. A primary stromal mesothelium tumor
   C. A primary epithelial mesothelium tumor
   D. An ovarian tumor with germinating cells
   E. A teratoma

9. **Which of the following statements regarding ovarian mucinous tumors is TRUE:** (378) G
   A. They are primary stromal mesothelium tumors
   B. They can reach large sizes and are bilateral in 10% of cases
   C. They are difficult to differentiate from a histological point of view from bone tumor metastases
   D. They show an irregular surface
10. Which of the following statements regarding clinical manifestations of genital syphilis is TRUE:
   (385) M  
   A. The soft chancre is a relatively small, painless ulceration  
   B. The hard chancre is a relatively small, painful ulceration  
   C. The primary syphilitic lesion is accompanied by painful groin adenopathy  
   D. The extra-genital chancre can be localized at the level of eyelids or fingers  
   E. The primary chancre is accompanied by generalized microadenopathy 

   **Multiple choice:**

11. The following can be identified via genital examination: (351) M  
   A. Cervico-isthmic insufficiency  
   B. Defects of the bone cervix  
   C. Vaginal septa  
   D. Endometrial hyperplasia  
   E. Vaginal condylomatosis 

12. In the 2nd trimester of pregnancy the following examinations are carried out with the EXCEPTION of: (325) M  
   A. From the 24th week of gestation, the frequency and quality of fetal heart beats shall be noted  
   B. A cardiotocography shall be made  
   C. The uterine fundus height is measured  
   D. A Manning score shall be made  
   E. The date of perceiving the first fetal movements shall be noted 

13. In case of a pregnant woman with negative RH: (351) M  
   A. Determination of the spouse’s RH is mandatory  
   B. In case of absent anti-D antibodies, the dosage of antibodies shall be repeated in the 20th week  
   C. At 28 weeks of amenorrhea, a specific anti-D immunoglobulin dosage shall be administered to the patient  
   D. Repeating the dosage of antibodies is made between 28 and 36 weeks of amenorrhea  
   E. Repeating the dosage of antibodies is made between 26 and 34 weeks of amenorrhea 

14. Regarding the biopsy of chorial villosities by a transvaginal approach, the following statements are TRUE: (356) M  
   A. A needle of 35 cm shall be inserted through the anterior vaginal sac fundus  
   B. The trophoblastic tissues is sampled after the 16th week  
   C. A biopsy sample contains no more than 3 mg of tissue  
   D. The possibility of maternal isoimmunization is a contraindication  
   E. After a biopsy of chorial villosities, the embryo heart activity is monitored for 30 minutes 

15. The following statements regarding pre-implantation embryo biopsy are true with the EXCEPTION of: (358) G  
   A. 2 blastomeres will be separated by micro-manipulation  
   B. The technique allows diagnosing a series of metabolic diseases  
   C. The blastomere shall be separated from the embryo
D. The technique comprises the incision of the pellucid area
E. There is the risk of impairing the embryo’s development

16. **Which of the following statements regarding cordocentesis are TRUE:** (357) M
   A. It is carried out only after 20 weeks
   B. Injection of physiological serum in the approached vessel allows the differentiation of the artery from the vein
   C. It is advised in detecting non-immune hydrops fetalis
   D. In patients with negative RH, anti-RH immunoglobulin shall be administered
   E. Intrauterine transfusion of the fetus is advised in auto-immune thrombocytopenia

17. **Which of the following statements regarding the Braxton-Hicks contractions are TRUE:** (361) M
   A. They start at the end of the 2nd trimester of pregnancy
   B. They are painless but regular contractions
   C. They become more frequent with the progression of pregnancy
   D. They cause modifications at the cervix level
   E. They remain irregular regarding time and intensity during the pregnancy

18. **Regarding the presumptive pregnancy signs and symptoms, which of the following are NOT true:** (361) M
   A. Cutaneous hyperpigmentation and occurrence of the facial aspect of “pregnant mask”
   B. Mammary glands are increased in volume, painless and turgid
   C. Negative Chadwick-Jaquemier sign
   D. The perception of fetal active movements which occur later in women giving birth for the first time
   E. Pollakiuria predominantly in the 2nd trimester of pregnancy

19. **Which of the following statements regarding HPV infection are TRUE:** (366) U
   A. The most frequent strain involved in cervix cancer is HPV-16
   B. It can be a transitory infection
   C. It can be a persistent infection
   D. The most frequent strain involved in cervix cancer is HPV-18
   E. The strains with medium malignity risk are most frequently encountered

20. **Which of the following statements regarding radical trachelectomy are FALSE:** (371) M
   A. It is associated with laparoscopic pelvic lymphadenectomy
   B. It does not preserve the fertile potential of the patient
   C. It is associated with menometrorrhagia
   D. It is advised in patients diagnosed with 2B stage cervix cancer
   E. It can be complicated with cervical stenosis

21. **The cervix cancer, 2A1 stage is NOT characterized by the following statements:** (369) G
   A. Invasion of the lower vaginal 2/3
   B. It involves the invasions of uterine parametrium
   C. It is a carcinoma exceeding the cervix limit but NOT in the lower third of the vagina
   D. The extension in the lower vaginal third without parametrial invasion
   E. It is a tumor with a maximum diameter < 4 cm
22. Which of the following are NOT risk factors for endometrial hyperplasia: (377) U
   A. Tardive menarche
   B. Therapy with Tamoxifen
   C. Early menopause
   D. Multiparity
   E. Syndrome of polycystic ovaries

23. The sub-serous uterine fibroma is characterized by the following with the EXCEPTION of: (372) U
   A. It is surrounded by a pseudo-capsule formed by areolar tissue and compressed muscle fibers
   B. It is a tumor with its origin at the level of striated muscle tissue
   C. It is developed on the external surface of the uterus
   D. It is located in the near vicinity of the endometrium
   E. It exceeds the external surface of the uterus

24. Which of the following statements regarding the occurrence of uterine leiomyomatosis are TRUE: (373) M
   A. Smoking can have a protective effect
   B. Early menarche decreases the risk of myomas
   C. Medroxyprogesterone acetate increases the risk of myomas
   D. Alcohol consumption decreases the risk of myomas
   E. Familial predisposition may have a protection effect

25. Which of the following statements regarding drug treatment in uterine leiomyomatosis are FALSE: (375) G
   A. The selective modulators of estrogenic receptors were used in case of patients being in post-menopause
   B. The most efficient form of medical therapy are GnRh agonists
   C. The selective modulators of progesteronic receptors have a high incidence of endometrial hyperplasia
   D. Mifepristine is associated with a transitory increase of hepatic cytolysis enzymes
   E. The treatment with GnRh agonists is advised for a period of at least 1 year

26. Which of the following statements regarding corpus luteal cysts are NOT true: (378) U
   A. They occur mainly unilaterally
   B. The occurrence of these cysts is associated with the presence of pregnancy
   C. They have maximum dimensions of 15 cm
   D. They have an ability of spontaneous regression
   E. They are associated with the presence of choriocarcinoma

27. The feminizing endocrine syndrome in active tumors from an endocrine point of view is characterized by the following: (379) U
   A. Clitoris hypertrophy
   B. Isosexual early puberty
   C. Atrophy of breasts
   D. Menstrual perturbations
   E. Hirsutism
28. Which of the following statements regarding the treatment of endometrial hyperplasia are TRUE: (377) M
   A. In some cases, weight decrease can also be advised
   B. In post-menopause, the cases with cellular abnormalities benefit from drug treatment for a period of 12 months
   C. The drug treatment with progestational drugs can be prescribed 15 days/month for 3 months until 6 months
   D. The surgical treatment consists in the insertion of an intrauterine device containing levonorgestrel
   E. In post-menopause, in cases of cellular abnormalities, surgical treatment is advised

29. Transcervical prolapse of a nodule in uterine leiomyomatosis is NOT characterized by: (375) G
   A. It is encountered in case of a sub-serious pediculate fibroma with a small base of implantation
   B. The practice consists in the extirpation of the nodule
   C. It is encountered in case of pediculate nodule with a low uterine implantation base
   D. Intensification of symptomatology occurs after nodule exteriorization
   E. Symptomatology is manifested by peritoneal irritation phenomena

30. Which of the following statements regarding dermoid cysts are TRUE: (378) U
   A. They are bilateral in 10% of the cases
   B. They are ovarian tumors with germinate cells
   C. The main risk is hemorrhage
   D. It is a stromal tumor
   E. It does not have the ability to become malign

31. Which of the following statements regarding bacterial vaginosis are TRUE: (384) U
   A. Smoking is a factor favoring the occurrence of bacterial vaginosis
   B. The symptomatology is marked by the presence of an intense itching and vulvovaginal sensation of burning
   C. The symptomatology is marked by the presence of an unpleasant vaginal smell of “fish”
   D. Leucorrhea is abundant, non-adherent and has a greenish color
   E. It is a complex unbalance of the normal vaginal flora

32. Which of the following statements regarding fungal vulvovaginitis are NOT true: (383) G
   A. It is manifested by a dense, whitish and non-adherent leucorrhea
   B. In chronic forms, causes may be absent
   C. The maintenance therapy in recurrent forms is administered for a period of 3 months
   D. Obesity favors fungal proliferation
   E. A correlation between the intensity of symptoms and objective examination is not always present

33. The chosen treatment in bacterial vaginosis consists of: (384) U
   A. Metronidazole in unique dosage
   B. Metronidazole 2 times a day, for 7 days
   C. Clindamycin 2 times a day, for 7 days
   D. Doxycycline 2 times a day, for 14 days
   E. Ceftriaxone in unique dosage
34. **Paraclinical explorations in pelvic inflammatory disease reveal the following:**

A. The cervical cultures are frequently positive for *Chlamydia trachomatis* and *Neisseria meningitidis*

B. Laparoscopy is the chosen method in case of an uncertain diagnosis

C. Endovaginal ultrasound is the golden standard due to the possibility of an early and certain diagnosis

D. Laparoscopy allows the drainage of tubo-ovarian abscesses and the lysis of adherences

E. Highlighting leukocytosis in vaginal secretion has a reduced specificity