



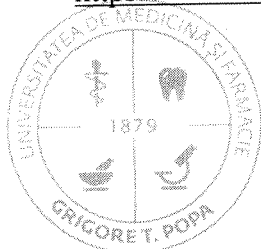
**STANDARDELE MINIMALE, NECESARE ȘI OBLIGATORII
PENTRU ÎNSCRIERE LA CONCURS
pentru ocuparea postului de Asistent Universitar,
perioadă determinată**

- Deținerea calității de student-doctorand (adeverința de la Școala Doctorală, ce va cuprinde și menționarea domeniului studiilor doctorale, obligatoriu din domeniul postului);
Atașat dosar - adeverință numărul 847 (11.06.2019)
- Deținerea titlului de medic rezident sau a unui titlu medical superior la disciplinele de concurs cu corespondent în Rețeaua Sanitară, în specialitatea postului ;
Atașat dosar - Certificat medic specialist numărul 27330
- Minimum 2 lucrări BDI, în extenso în reviste din domeniul postului pentru care candidează (medicină, medicină dentară, farmacie sau alte domenii, în conformitate cu postul scos la concurs), publicate în ultimii 5 ani, ca autor principal sau co-autor.

Nu sunt luate în considerare adeverințele de accept de publicare.

Revistă indexată BDI¹

1. **Alexandra Carp**, Ramona Cazacu, Anca Berescu, Andrei Dumitrescu, Alexandru Luca, Mircea Onofriescu. Burkitt Lymphoma in an adult AIDS C2 female patient. Rev med. Chir. Soc. Med. Nat. Iasi, 2015, vol 119, no 3.
<https://www.revmedchir.ro/index.php/revmedchir/article/view/386>
2. Matasariu DR, Mihaila A, Tanase A, Dumitrascu I, **Ursache A**, Onofriescu M. Incidence of endometriosis - a matter of public concern. *Med. Surg. J.-Rev. Med. Chir. Soc. Med. Nat. Iasi*. 2019; vol. 123 No 1 (2019), martie 2019.
<https://www.revmedchir.ro/index.php/revmedchir/article/view/1734>



RECTORAT

+40 232 211 818 tel / +40 232 211 820 fax
rectorat@umfiasi.ro

¹ Autori, titlu articol, nume revistă, volum, număr, paginatie, numele bazei internaționale de date, link

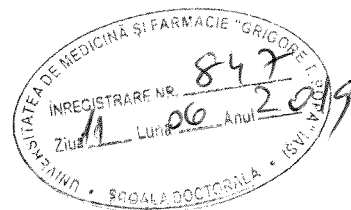
168

Pentru posturile de asistent pe perioada determinată, altele decât cele din domeniul sănătate, se aplică standardele minimale ale Universității noastre, conform legislației în vigoare.



UNIVERSITATEA DE MEDICINĂ ȘI FARMACIE
GRIGORE T. POPA IAȘI

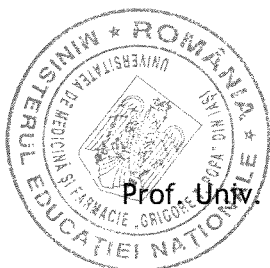
Str. Universității nr.16, 700115, Iasi, România
www.umfiiasi.ro



ADEVERINȚĂ

Se adeverește prin prezenta că doamna CARP (URSACHE) ALEXANDRA este înscrisă la doctorat „bugetat, cu frecvență” începând cu data de 1.X.2015, în domeniul MEDICINĂ, specialitatea OBSTETRICĂ - GINECOLOGIE, având conducător științific pe domnul Prof. Univ. Dr. Mircea Onofriescu.

S-a eliberat prezenta pentru a-i servi la completarea dosarului personal.



RECTOR,

Prof. Univ. Dr. Viorel Scripcariu

SECRETAR ȘEF UNIVERSITATE,

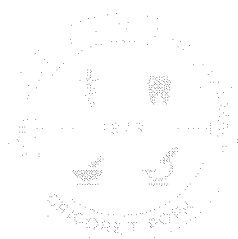
Gabriela Cuciureanu

DIRECTOR
Consiliul Școlii Doctorale

Prof. Univ. Dr. Cristina Rusu

SECRETAR
Școala Doctorală

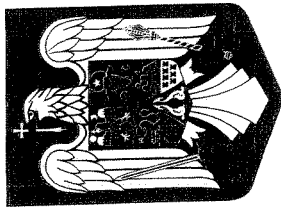
Consuela Mitsovs



RECTORAT

+40 232 211 819 fax +40 232 211 820 /fax
rektorat@umfiiasi.ro

170



ROMÂNIA
MINISTERUL SĂNĂTĂȚII

CERTIFICAT

DE MEDIC SPECIALIST

Se certifică prin prezentul că:

CARP I. ALEXANDRA

este confirmat(ă) MEDIC specialist în specialitatea OBSTETRICĂ-GINECOLOGIE

prin Ordinul Ministrului Sănătății nr. 1 din 2016

pe baza examenului susținut în sesiunea OCTOMBRIE 2015 și promovat cu media generală ...

Eliberat la data de 04.01.2016 cu numărul 27330

Prezentul certificat s-a eliberat în conformitate cu prevederile legale.

DIRECTOR GENERAL,

IONUT SEBASTIAN IAVOR



CONSILIER,

GABRIELA CHELBA

T.S.

SURGERY

CASE REPORTS

BURKITT LYMPHOMA IN AN ADULT AIDS C2 FEMALE PATIENT

Alexandra Carp, Ramona Cazacu*, Anca Berescu,

A. Dumitrescu, A. Luca, M. Onofriescu

University of Medicine and Pharmacy "Grigore T. Popa"- Iasi

Faculty of Medicine

Department of Mother and Child Medicine

CuzaVoda Obstetrics & Gynecology Hospital, Iasi

1st Obstetrics and Gynaecology Clinic

*Corresponding author. E-mail: message_for_ramona@yahoo.com

BURKITT LYMPHOMA IN AN ADULT AIDS C2 FEMALE PATIENT (Abstract): We report the case of a 24- year-old female patient with stage C2 HIV infection presenting with complaints of fatigue and altered general status. She reported having amenorrhea for 4 months and pelvic pain. Her medical history was characteristic to lack of compliance with treatment, the viral load remaining high despite the prescribed intensive antiretroviral treatment. Intraoperatively we found: hypoplastic uterus of 30/20/20 mm in size and complete cystic transformation of the right ovary, the cyst size being of about 60/50 mm and the capsule intact. A right adnexectomy was performed. Immunohistological assessment about one month after surgery made the final diagnosis of Burkitt lymphoma. Studies show that an old HIV infection is associated with a higher risk for non-Hodgkin lymphoma (NHL) compared to patients with quite recent HIV infection. Conclusions: The reported case had high CD4 levels at the time of diagnosis and also a particular extranodal involvement, the right adnexa. The CD4 level was 198/mm³ at the time the adnexal tumor was discovered, level reached after a long period of time of low CD4 levels and high viral load. **Keywords:** BURKITT LYMPHOMA, HIV INFECTION, OVARIAN TUMOR.

Burkitt lymphoma is a high-grade B-cell lymphoma classified as a non-Hodgkin lymphoma (NHL) (1). There have been described 3 main clinical types of Burkitt lymphoma: endemic, sporadic and immunodeficiency-associated (2). Immunodeficiency-associated Burkitt lymphoma is usually associated with HIV (human immunodeficiency virus) infection or occurs in post-transplant patients taking immunosuppressive drugs (3). Burkitt lymphoma can be one of the diseases associated with the initial manifestation of AIDS (acquired

immune deficiency syndrome) (4).

As the other HIV-related non-Hodgkin lymphomas, Burkitt lymphoma has a poor prognosis, mainly due to the advanced stage of disease at the time of diagnosis, extranodal involvement and B symptoms (weight loss >10% of original body weight, night sweats and fever) (5). Patients are often included into the intermediate or high-risk group, based on the International Prognostic Index (IPI), which scores patients according to age (> 35 years), stage III or IV of disease, increased serum lactate

dehydrogenase (LDH), and extranodal involvement (6).

Burkitt lymphoma is the second commonest histological subtype of HIV-related lymphoma, after diffuse large B-cell non-Hodgkin's lymphoma (7). There is a clear correlation between the levels of CD4 cell count and the risk of developing NHL (5). It is thought that immune stimulation by HIV and reactivation of previous Epstein-Barr virus (EBV) infection due to defective T-cell surveillance, results in long-term stimulation and proliferation of B lymphocytes, ultimately leading to the development of HIV-related NHL (5).

CASE REPORT

A 24-year-old Caucasian female patient, diagnosed HIV-positive at the age of 11 and currently in C2 stage of HIV infection due to recurrent pneumonia, presented to our clinic in June 2013 complaining of abdominal pain, edema of the upper and lower limbs, fatigue and altered general status. The patient reported having amenorrhea for 4 months and the occurrence 3 month earlier of pelvic pain which tended to get worse.

Her *medical history* was characteristic for noncompliance to treatment (8), the viral loads remaining high despite the prescribed intensive antiretroviral treatment. Until August 2006, the CD4 counts were between 250-400 cells/mm³, but the viral load had never decreased enough to get close to undetectable levels, the lowest viral load that was ever recorded for the patient being 42.100 copies /ml. After Indinavir was withdrawn from the Romanian pharmaceutical market, she was prescribed another type of protease inhibitor, Saquinavir (SQV), associated with Ritonavir (RTV), Abacavir (ABC) and Did-

anosine (ddI). Despite the aggressive treatment the results were far from optimal, the viral load reaching a level of 2.500.000 copies/ml. In September 2009, the patient was prescribed Kaletra (Lopinavir and Ritonavir) together with Combivir, the combination offering a comfortable administration of only 6 cps/day, association known as highly active antiretroviral therapy (HAART), which covers the sanctuaries of HIV infection such as the ovarian stroma. Unfortunately the patient was noncompliant. At that time also appeared the idea of a possible virus resistance to therapy due to the high viral loads difficult to control therapeutically. As CD4 levels were low (123/mm³) while the viral load continued to be high (128.000 copies/ml), an antiretroviral drug-resistance test was performed in February 2011. As the test showed Darunavir (DRV) to be the most effective the therapeutic scheme was changed, but until December 2011 the CD4 levels continued to decrease while the viral load increased. The patient admitted that sometimes she was not taking her medication for 10-14 days in a row.

Physical examination revealed: afebrility, slightly pale teguments, micropolyadenopathy in the inguinal, cervical, supraclavicular and axillary groups and normal respiratory tract and cardiovascular system evaluation. The patient complained of pain in the right iliac fossa. Gynecological examination showed a white vaginal discharge, confirmed a hypoplastic uterus, an enlarged right ovary of approximately 60/50 mm in diameter, with regular contour, sensitive to bimanual palpation.

Relevant *laboratory tests* included: anemia (Hb-8.6 g/dl), normal white blood count (WBC-5.6x10³/μL), low GR (2.7x10³/μL), low APTT (20.1/sec), normal

inflammatory markers (CRP and ESR), high uric acid (6.61 mg/dl), ALAT, ASAT (32 U/L and 46 U/L), Coli/ESBL in vaginal culture.

On the first night in hospital the patient was hyperpyretic (39°C) and shivering; before the antibiogram for *Escherichia Coli* vaginal infection was available ampicillin was used as empiric treatment to which the fever having no response it was replaced with a 3rd generation cephalosporin that also proved to be ineffective. The next day the patient was referred to the Infectious Disease Hospital for further investigations and specific treatment.

After one month the patient was rescheduled for surgery. During this time the physical status had improved, amenorrhea, fatigue and the slight abdominal pain remaining the only complaints. Anemia was corrected with oral iron supplements (Hb-10.2g/dl), the patient presenting normal white blood cell count and moderate in-

crease of inflammatory markers (CRP and ESR).

At surgery, after opening the peritoneal cavity the following were found: hypoplastic uterus (30/20/20 mm); the left adnexa appeared normal; the right adnexa: right ovary - complete cystic transformation, size of the cyst about 60/50 mm in diameter, intact capsule, with a regular contour and the right tube impossible to differentiate from the cystic tumor. Through the transparent cyst capsule a solid component of the tumor was noticeable. No lymphadenopathy was visible macroscopically in the pelvic area. Right adnexectomy was performed without damaging the cyst capsule. The next day the patient was transferred to the Infectious Disease Hospital for further care.

The macroscopic examination of the ovarian tumor made the diagnosis of solid ovarian tumor and cut sections of tumor revealed necrotic areas (Fig. 1, 2).

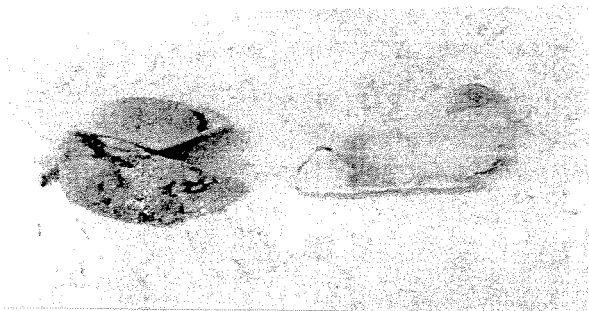


Fig. 1 Ovarian tumor - macroscopic aspect

The histopathological examination revealed: proliferation of small tumor cells containing solid deposits, moderate pleomorphism, 1-3 macronucleoli, reduced or moderate cytoplasm, intensive mitotic activity and necrosis (Fig. 3, 4). The histopathological diagnosis was suggestive of small cell neoplasia or non-Hodgkin lymphoma (p T1a Nx Mx G3), the immuno-



Fig. 2 Ovarian tumor - macroscopic aspect

histological examination performed about one month after surgery establishing the final diagnosis - Burkitt lymphoma (CD20, BCL6 and KI67 positive and CD3, Cytokeratin AE1/3 negative).

The patient was referred to the Regional Cancer Institute for further treatment. The protocol for Burkitt lymphoma required a CT-scan which was performed in Septem-

Burkitt lymphoma in an adult AIDS C2 female patient

ber and showed supraclavicular, inguinal, and laterocervical micropolyadenopathies and a connective tissue mass located in the thymic compartment.

The routine follow-up 2 months postoperatively revealed: absence of pelvic pain, persistence of amenorrhea for 6 months,

absence of digestive or urinary complaints, fully healed surgical scar. She was prescribed Duphaston 10 mg (2 tablets/day) for 7 days, followed by combined oral contraception starting on the first day of menstruation, in order to control the ovarian function.



Fig. 3. Tumoral necrosis and intensive mitotic activity (HE x 40)

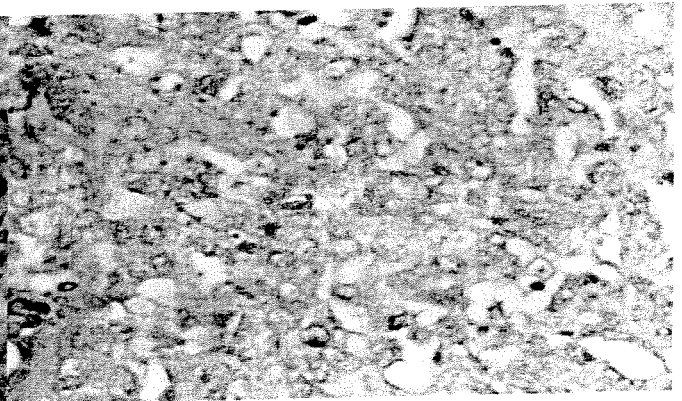


Fig. 4. Intense proliferation of small cells (1-3 macronucleoli), reduced or moderate cytoplasm, containing solid deposits, moderate pleomorphism (HE x 20)

In October chemotherapy was initiated, using the fractionated protocol: course A consisting in the administration of cyclophosphamide, vincristine, adriamycin and dexamethasone, followed by course B including the administration of methotrexate and cytarabine, very well tolerated by the patient. The next scheduled appointment for chemotherapy is October 30. Until then the patient was prescribed Neupogen-1 (granulocyte colony-stimulating factor) subcutaneously for 10 days.

DISCUSSION

AIDS and immunosuppression create an adequate environment for the development of malignant tumors that are highly aggressive and generally have a poor prognosis (2). Studies show that an old HIV infection (≥ 8 years) is associated with a higher risk

for NHL compared to patients with quite recent HIV infection (< 4 years), our patient being diagnosed HIV positive since she was 11 years old (4). Prolonged immunosuppression is correlated with high CD4 count that is associated to a higher risk for NHL ($CD4 > 150$ cells/ μ L), in our case the viral load was always high due to noncompliance with treatment (6).

The most common symptoms in AIDS-related lymphomas are the B type symptoms: fever, weight loss and night sweats (9), of which our patient presented only fever (5). Extranodal involvement is quite common, the most frequently affected being the gastrointestinal tract, liver or central nervous system, bone marrow included (3). Adnexal involvement is considered a rare extranodal site of the Burkitt lymphoma, especially in the case of a primary

extranodal involvement (3). Most patients are diagnosed with advanced-stage disease (1).

The treatment of Burkitt lymphoma in AIDS patients involves complex chemotherapy regimens (10). The HAART therapy, also administered to our patient, has been proven to determine a decline in CD4 cells count and associated with Neupogen determines less myelotoxicity and a better tolerance to therapy (10).

The prognosis in AIDS-related Burkitt lymphoma is poor and survival rates are of 2 to 24 months, evaluated according to CD4 T-helper lymphocyte count (<100 cells/ μ L), age (> 35 years), intravenous drug use and stage III or IV disease at the time of initial diagnosis (4).

CONCLUSIONS

The case we have reported had high CD4 levels at the time of diagnosis and a particular extranodal involvement. The CD4 level was 198/mm³ at the time the adnexal tumor was discovered, level reached after a very long period of time of low CD4 levels associated with high viral load. The patient presented fever, but no weight loss or night sweats. She was diagnosed with stage I disease.

In our patient the prognosis was relatively favorable on specific treatment for AIDS and complex chemotherapy regimen administered for Burkitt lymphoma.

The particularity of this case is the primary extranodal involvement of the right adnexa, uncommon in Burkitt lymphoma.

REFERENCES

1. Taylor, J.S., et al., Burkitt's lymphoma presenting as ovarian torsion. *Am J Obstet Gynecol*, 2012. 207(2): e4-6.
2. Ferry, J.A., Burkitt's lymphoma: clinicopathologic features and differential diagnosis. *Oncologist*, 2006. 11(4): 375-383.
3. Stroup, J.S., et al., Burkitt Lymphoma in an Adult HIV-Positive Patient. *Infectious Diseases in Clinical Practice*, 2007. 15(2): 116-118.
4. Lee, B., et al., HIV-related lymphoma. *HIV Therapy*, 2010. 4(6): 649-659.
5. Bower, M., et al., A prognostic index for systemic AIDS-related non-Hodgkin lymphoma treated in the era of highly active antiretroviral therapy. *Ann Intern Med*, 2005; 143(4): 265-273.
6. Magri, K., D. Riethmuller, and R. Maillet, [Pelvic Burkitt lymphoma mimicking an ovarian tumor]. *J Gynecol Obstet Biol Reprod (Paris)*, 2006; 35(3): 280-282.
7. Guech-Ongey, M., et al., AIDS-related Burkitt lymphoma in the United States: what do age and CD4 lymphocyte patterns tell us about etiology and/or biology? *Blood*, 2010; 116(25): 5600-5604.
8. Manciu, C., et al., The HIV-positive patient in intensive care--psychological profile. *Rev Med Chir Soc Med Nat Iasi*, 2014; 118(3): 738-742.
9. Manciu, C., et al., Lymphoma in an HIV-positive patient. *Rev Med Chir Soc Med Nat Iasi*, 2015; 119(1): 97-100.
10. Little, R.F., et al., Highly effective treatment of acquired immunodeficiency syndrome-related lymphoma with dose-adjusted EPOCH: impact of antiretroviral therapy suspension and tumor biology. *Blood*, 2003; 101(12): 4653-4659.

INCIDENCE OF ENDOMETRIOSIS - A MATTER OF PUBLIC CONCERN

**Daniela-Roxana Matasariu^{1,2}, Alexandra Mihaila², Adina Tanase^{1,2},
Irina Dumitrascu^{1,2}, Alexandra Ursache^{2*}, M. Onofriescu^{1,2}**

“Grigore T. Popa” University of Medicine and Pharmacy Iasi
Faculty of Medicine

1. Department of Mother and Child Medicine

2. “Cuza-Voda” Obstetrics and Gynecology Clinical Hospital, Iasi

*Corresponding author. E-mail: carpalecsandra@yahoo.com

INCIDENCE OF ENDOMETRIOSIS-A MATTER OF PUBLIC CONCERN (Abstract):

There is an increasing trend in the incidence of endometriomas, the disease affecting about 5-10% of women of reproductive age. **Aim:** To determine the incidence of endometriosis in patients undergoing surgery for gynecological diseases at the “Cuza-Voda” Obstetrics and Gynecology Clinical Hospital from Iasi. **Material and methods:** Retrospective study of 12,178 patients followed up for 5 years (January 2010 to December 2015) assessing the detection rate of endometriosis and possible diagnostic methods, as well as differential diagnosis with other pelvic pathologies. **Results:** Distribution of cases by the six years of study identified an increase in the incidence of endometriosis in our clinic. A possible explication can be the improved diagnostic techniques and, also women's concern with infertility. Of the 12178 operated patients, only 1,100 were diagnosed with endometriosis. The highest incidence was recorded in 2015, 21.10 %. **Conclusions:** The incidence of endometriosis was of 9.03% and showed a rise in the past 6 years, due to the improved diagnostic techniques and women increasing preoccupation with the topic of infertility. **Keywords:** ENDOMETRIOSIS, INFERTILITY, INCIDENCE.

Endometriosis is one of the most frequent diseases in gynecological practice. It affects women of fertile age, being the second cause for surgical interventions after uterine fibromas during premenopause. There is an increasing trend in the incidence of endometriomas, the disease affecting about 5-10% of women of reproductive age (1, 2). It is one of the most important public health concerns, because of the continuous increase in the number of cases. Also, the risk of malignant transformation motivates the numerous researches focused on explaining the development

mechanisms and the progression of this disease, 10% of endometrioid carcinomas of the ovary are associated with endometrioid carcinomas of the uterus (3, 4). Symptoms represent another problem, because they can vary from total absence to progressive course with multiple complications (5). Also, it is important to evaluate the implications of the disease regarding infertility. Both endometriosis and the surgical treatment for this disease have fertility consequences, with alterations of the AMH values (6).

The incidence of this disease grew ex-

ponentially, accounting for 2% of the general population, being the third cause for gynecological examination for infertility, chronic pelvic pain, dyspareunia and dysmenorrhea. The prevalence of endometriosis has also an increasing trend, up to 25-50% of infertile women being diagnosed with endometriosis, and about 30-50% of women with endometriosis being infertile. Endometriosis affects 7-15% of women of reproductive age, and 25-30% of all women with infertility, having a high social impact. The incidence of this disease rose exponentially following the introduction of new diagnostic methods such as endovaginal ultrasound and exploratory laparoscopy (7). Endometriosis affects 1% of asymptomatic women and up to 60% of women with chronic pelvic pain (8, 9). Endometriosis has a major social impact, and it was reported that quality of life was significantly reduced in women with endometriosis (9, 10). It is diagnosed in women aged 12-80 years old, with a peak incidence around the age of 28 years old (11, 12).

Studies show that endometriosis has a higher incidence in Caucasian, compared with Afro-Americans or Asian women (13, 14). Also, patients with endometriosis are taller, thinner, and have a significantly lower body mass index (BMI) (14).

The main objectives of this research are to evaluate the incidence of endometriosis in patients undergoing surgery for gynecological diseases at the Iasi "Cuza-Voda" Obstetrics and Gynecology Clinical Hospital, and the impact of endometriosis on quality of life.

MATERIAL AND METHODS

Given that the global estimates of the incidence of endometriosis vary considerably, the aim of our study was to identify the

incidence and prevalence of this disease among the gynecological patients admitted to the "Cuza-Voda" Obstetrics and Gynecology Clinical Hospital, Iasi.

This is a retrospective study of 12,178 patients followed up from January 2010 until December 2015 with regard to the detection rate of endometriosis and possible diagnostic methods, as well as differential diagnostics with other pelvic diseases. This study included all patients admitted to the gynecology department. Patients admitted to the obstetrics department were excluded. Surgical interventions were performed either laparoscopically or by open laparotomy. A number of 1,100 of patients met the inclusion criteria, the ones diagnosed with endometriosis either pre or post operatory, histologically confirmed.

Data processing was carried out using *SPSS 18.0*.

RESULTS AND DISCUSSION

In the total of 1,100 surgeries performed during the interval 2010-2015 at the "Cuza-Voda" Obstetrics and Gynecology Clinical Hospital from Iasi the highest incidence was recorded in 2015 - 21.1%. The trend for the following period was upward (fig. 1). The prevalence of surgical interventions in the Gynecological Department ranged from 18.5% in 2010 to 13.8% in 2015, while the trend during the study interval was relatively constant ($y = 19.31 - 0.75x$), approximately 14%.

Surgeries for infertility peaked in 2013-19.3% and 2014-19.2%, while the trend for the following period of time was relatively constant ($y = 17.41 - 0.21x$), with an estimation for the near future of 16%. During the study interval, the most frequent surgeries involved the ovaries (62.5%), and the peritoneum (31.8%) (fig. 2).

Incidence of endometriosis - a matter of public concern

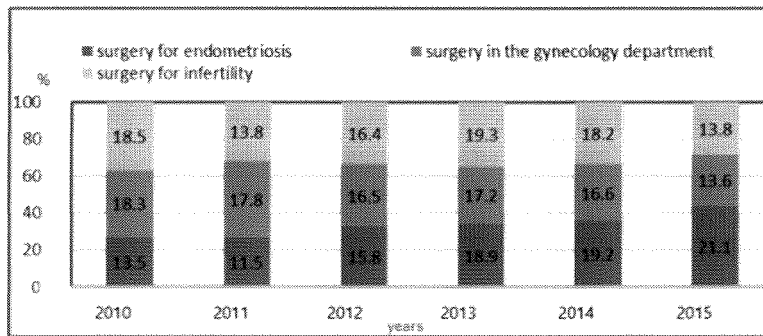


Fig. 1. Distribution of surgeries by study years

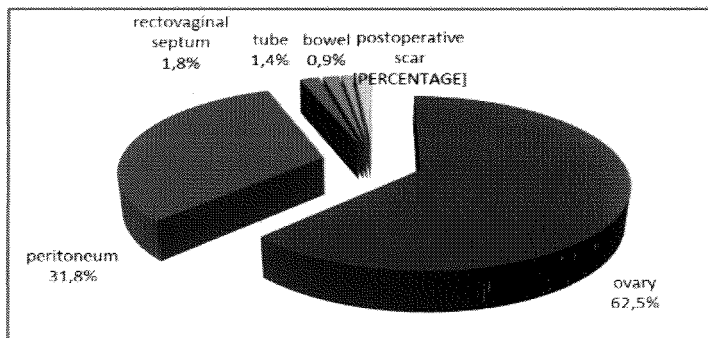


Fig. 2. Frequency of surgical interventions performed between 2010 and 2015 in patients with endometriosis, according to their location

Distribution of cases which underwent ovarian surgery showed a slight increase beginning with 2012 and ranged from 114 cases in 2012 to 139 in 2015.

The number of surgeries for peritoneal

endometriosis was relatively constant between 2013 and 2015 (72-75 cases, while the number of surgeries for C-section scar, intestinal, rectovaginal s and fallopian tube endometriosis was low (fig. 3).

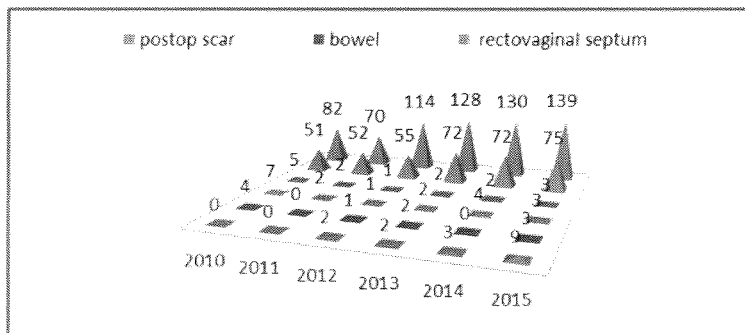


Fig. 3. Distribution of operated endometriosis cases by study years

179

During the study interval, surgeries for infertility accounted for 10-11% of the total surgical interventions, while surgeries for endometriosis ranged from 9.9% to 14% (fig. 4).

By analyzing the medical records of patients admitted for endometriosis treatment,

we found that the main symptom described was chronic pelvic pain, followed by other complaints such as: infertility, dysmenorrhea, dyspareunia, menstrual spotting, ovarian tumor detected during a routine check-up, abnormal menstrual cycles, bowel malfunction and urinary complaints.

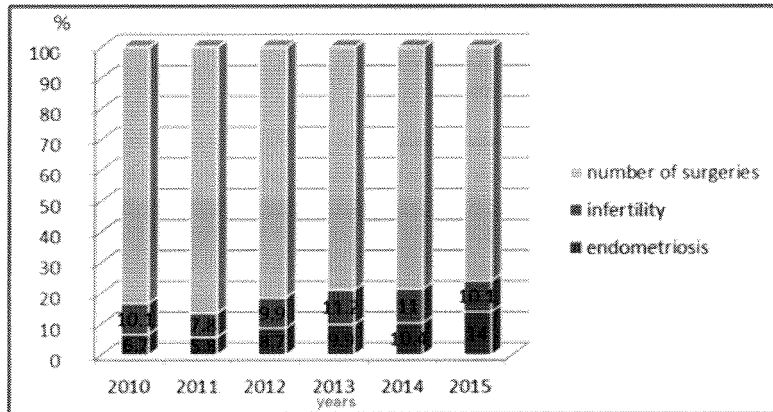


Fig. 4. Prevalence of cases with endometriosis and infertility from the total surgical intervention in the gynecology department

Infertility was described as the impossibility of conceiving after regular, unprotected sexual contacts for 12 months, after excluding any documented cause of male infertility. Also evaluated was the social status of these patients and we noticed that the patients with a higher education level and those with a good socio-economic status had better use of healthcare services, the last ones representing 94.5% of the total number of endometriosis patients. According to civil status, 847 of our patients were in a stable relationship. Of these 72.54% were married, 15.34% were not married, and only 12.12% were cohabitating. As to the place of residence, 953 of the 1,100 patients lived in an urban area and only 147 in rural areas.

Endometriosis is a major public health concern mainly because of the continuously

increasing number of cases and the risk of ovarian malignancy. Ten percent of endometrioid carcinomas of the ovary were associated with endometrioid carcinomas of the uterus, fact that motivates the numerous researches focused on explaining the development mechanisms and the progression of this disease (6). The incidence of this disease rose exponentially following the introduction of new diagnostic methods such as intravaginal ultrasound and laparoscopy, an incidence of 2% in the general population being reported. It represents the third cause of gynecological assessment for infertility, chronic pelvic pain, dyspareunia and dysmenorrhea.

The prevalence of endometriosis rose dramatically going up to 25-50% in women with infertility, 30-50% of women with endometriosis suffering also from infertility.

ty. Endometriosis affects 7-15% of women of fertile age, representing 25-30% of sterility cases, with an important social impact (7). The main form of endometriosis that can be found prior to surgical intervention is ovarian endometrioma. Knowing the importance of early diagnosis, pelvic pain, dysmenorrhea, dyspareunia, or infertility can suggest it. Of the total number of patients, 1,100 had an intraoperative diagnosis of pelvic endometriosis, histologically confirmed, accounting for 9.03%. This finding agrees with the data in the literature reporting an incidence of up to 10% (6,15).

Distribution of cases by the six years of study identified an increase in the incidence of endometriosis in our clinic. A possible explanation can be the improved diagnostic techniques, and also women's concern with infertility. Ovarian endometriomas are a common manifestation of endometriosis. These "chocolate" cysts are surrounded by a pseudo capsule adherent to the normal ovarian tissue. The ovary can be attached to the peritoneum, bowel and pouch of Douglas, frequently with modified pelvic anatomy.

The incidence of cesarean section delivery grew in the past years so the number of cases with endometriosis at the level of the cesarean scar was also rising. Because endometriosis is frequently underdiagnosed because of the absence of symptoms, its prevalence cannot be precisely estimated. According to studies endometriosis is present in 1% of asymptomatic patients, and in 60% of women with chronic pelvic pain (8, 9).


In 2012, a German study concluded that the incidence of endometriosis is 0.8% (8, 9), and a 2013 study showed that 62% of patients presenting chronic pelvic pain or dysmenorrhea had endometriosis (9, 16).

But there are also studies reporting an incidence of endometriosis of 2% in the general population (17) associated with chronic pelvic pain in 70% of cases and with infertility in 25-30% (18, 19). Vercellini *et al.*, in a 2016 study state that 5% of women of reproductive age suffer from this disease (20, 21, 22).

Of the 12,178 operated patients in "Cuza-Voda" Obstetrics and Gynecology Clinical Hospital from Iasi, only 1,100 were diagnosed with endometriosis. From January 2010 till December 2015, there was an increase for the incidence of endometriosis in women in the Moldavian area. Therefore, endometriosis is a disease with constantly increasing incidence, whose etiology is not fully elucidated and, moreover, with a major impact on physical, mental and social health.

From a demographic point of view, the patient with pelvic endometriosis is a woman residing in an urban area, married, with higher education and a high socioeconomic status, presenting to the physician with chronic pelvic pain, dysmenorrhea, dyspareunia and/or infertility. Although all these symptoms have a high sensitivity for endometriosis, their specificity is at the opposite pole, being low. Therefore, both the unique symptoms and the symptomatology should be noted by the clinician in a timely manner, with the exclusion or confirmation as soon as possible of the diagnosis of endometriosis. In our study, we brought up to date the literature data regarding the incidence of endometriosis, and also contributed with the demographic characteristics of our study group.

With the help of the data from literature, we conducted an empirical research of an actual theme, endometriosis being one of the great unknowns of medicine, a fluid

181 

theme that continues to surprise elements of novelty that emerge to the surface, frequently succeeding to induce in error even a close researcher. So, as to endometriosis incidence, we provided not only a much needed up-to-date of known statistical data but also a precise analysis at regional level. The incidence of endometriosis and its impact on women life were studied in a large sample group.

That is why, one of the perspectives opened by this article is the need for a multicenter study, that can sum up data from all regions of Romania in order to obtain a clearer image of these parameters, nationwide, and to compare the Romanian regions and why not, international studies regarding this matter. Also, a multicenter study presents the advantage of identifying

new risk factors for the development of endometriosis.

CONCLUSIONS

In our study, the incidence of endometriosis was of 9.03%, with an increase in the past 6 years due to the improved diagnostic techniques and infertility preoccupation among women. Demographically speaking, women with pelvic endometriosis represents the modern person who presents to the hospital with chronic pelvic pain, dysmenorrhea, dyspareunia and infertility. Patients with endometriosis confront themselves with a series of clinical symptoms described above, and also with emotional instability, high stress levels, all of these having a negative impact on the quality of their lives.

REFERENCES

1. Taylor RN, Yu J, Torres PB, *et al.* Mechanistic and therapeutic implications of angiogenesis in endometriosis. *Reprod Sci* 2009; 16(2): 140-146.
2. Qian X, Wu H, Xi X. Is there a relationship between polycystic ovary syndrome and endometriosis? *J Reprod Contracept* 2011; 22(3): 177-182.
3. Bulun SE. Endometriosis. *N. Engl. J. Med.* 2009; 360: 268-279.
4. Giudice LC. Clinical practice. Endometriosis. *N. Engl. J. Med* 2010; 362(25): 2389-2398.
5. Signorile PG, Baldi A. Endometriosis: new concepts in pathogenesis. *Int J Biochem Cell Biol.* 2010; 42: 778-780.
6. Doroftei B, Mambet C, Zlei M. It's never over until it's over: how can age and ovarian reserve be mathematically bound through the measurement of serum AMH - a study of 5,069 Romanian women. *Plos One* 2015; 10(4): e0125216.
7. Albu (Matasariu) DR, Iacob M, Dumitrascu I, *et al.* Desogestrel in the preoperative treatment of endometriosis cysts. *Rev. Med. Chir. Soc. Med. Nat. Iasi.* 2015; 119(3): 710-714.
8. Abbas S, Ihle P, Koster I, Schubert I. Prevalence and incidence of diagnosed endometriosis and risk of endometriosis in patients with endometriosis-related symptoms: findings from a statutory health insurance-based cohort in Germany. *Eur J Obstet Gynecol Reprod Biol.* 2012; 160: 79-83.
9. Aznaurova YB, Zhumataev MB, Roberts TK, *et al.* Molecular aspects of development and regulation of endometriosis. *Reprod Biol Endocrin.* 2014; 12: 50-74.
10. Meuleman C, Tomassetti C, Gaspar Da Vitoria Magro M, *et al.* Laparoscopic treatment of endometriosis. *Minerva Ginecol.* 2013; 65: 125-142.
11. Rawson JM. Prevalence of endometriosis in asymptomatic women. *J Reprod Med* 1991; 36: 513-515.
12. Falcone T, Lebovic DI. Clinical management of endometriosis. *Obstet Gynecol.* 2011; 118: 691-705.

13. Houston DE. Evidence for the risk of pelvic endometriosis by age, race, and socio-economic status. *Epidemiol Rev* 1984; 6: 167.
14. Ionescu C, Pacu I, Peltecu Gh. Endometrioza. In: Peltecu G, Popescu I, Ciuce C. *Tratat de chirurgie vol.V, Obstetrică și Ginecologie*. București: Editura Academiei Române, 2014, 53-73.
15. Cramer DW, Missmer SA. The epidemiology of endometriosis. *Ann N Y Acad Sci* 2002; 955: 11-22, 34-16, 396-406.
16. Janssen EB, Rijkers AC, Hoppenbrouwers K, *et al*. Prevalence of endometriosis diagnosed by laparoscopy in adolescents with dysmenorrhea or chronic pelvic pain: a systematic review. *Hum Reprod Update* 2013; 19(5): 570-582.
17. Machairiotis N, Stylianaki A, Dryllis G, *et al*. Extrapelvic endometriosis: a rare entity or an under diagnosed condition? *Diagn Pathol* 2013; 8:194.
18. De Ceglie A, Bilardi C, Bianchi S, *et al*. Acute small bowel obstruction caused by endometriosis: a case report and review of the literature. *World J Gastroenterol*. 2008; 14(21): 3430-3434.
19. Bulletti C, Coccia ME, Battistoni S, *et al*. Endometriosis and infertility. *J Assist Reprod Gene*. 2010; 27(8): 441-447.
20. Viganò P, Parazzini F, Somoglian E, Vercellini P. Endometriosis: epidemiology and etiological factors. *Best Pract Res Clin Obstet Gynaecol*. 2004; 18: 177-200.
21. Gylfason JT, Kristjansson KA, Sverrisdottir G, *et al*. Pelvic endometriosis diagnosed in an entire nation over 20 years. *Am J Epidemiol*. 2010; 172: 237-243.
22. Vercellini P, Buggio L, Berlanda N, *et al*. Estrogen-progestins and progestins for the management of endometriosis. *Fertil Steril* 2016; 106(7): 1552-1571.

NEWS

NEOADJUVANT CHEMOTHERAPY VERSUS UPFRONT DEBULKING SURGERY IN ADVANCED TUBO-OVARIAN CANCER

In a comparison of neoadjuvant chemotherapy and upfront debulking surgery, they noted no difference in overall survival among 1220 women with International Federation of Gynecology and Obstetrics (FIGO) stage III-IV tubo-ovarian cancer. Median overall survival, which was the primary endpoint of the analysis, was 26·9 months (IQR 12·7–50·1) in patients randomly allocated to receive upfront debulking surgery, and 27·6 months (14·1–51·3) in women randomly assigned to neoadjuvant chemotherapy (hazard ratio [HR] 0·97, 95% CI 0·86–1·09; $p=0·586$). In subgroup analyses, a gain of 3 months in median overall survival was noted for neoadjuvant chemotherapy as compared with upfront debulking surgery in 230 patients with stage IV disease, whereas overall survival was better with upfront debulking surgery than with neoadjuvant chemotherapy in 266 women with stage IIIC disease and extrapelvic metastases smaller than 5 cm (Anna Fagotti, Giovanni Scambia. Neoadjuvant chemotherapy versus upfront debulking surgery in advanced tubo-ovarian cancer. *The Lancet Oncology* DOI: [https://doi.org/10.1016/S1470-2045\(18\)30625-9](https://doi.org/10.1016/S1470-2045(18)30625-9)).

183 