

# OVARIAN CANCER - ACCIDENTAL DIAGNOSIS?

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## ABSTRACT

*Ovarian cancer is perhaps the most "worst" pathology in women's genital area and represents the greatest diagnostic challenge and surgical treatment of genital cancers, and as much as the disease has an onset and asymptomatic evolution to the advanced stages or with a confused symptom.*

*The present study was performed due to the following factors characterizing ovarian cancer: increasing incidence, early diagnosis, lack of screening methods, difficult anatomopathological differentiation even for experienced anatomopathologists.*

*Keywords: ovarian cancer, diagnosis*

## Introduction

Because epidemiological factors associated with reducing the risk of ovarian cancer are generally associated with diminished ovulation, etiological theories are grouped into three categories: incessant ovulation, increasing the time of exposure to circulating pituitary gonadotropin, the presence of ovarian cysts of inclusion, possibly secondary to trauma or the increase in epithelial proliferation. Incriminated epidemiological factors are: personal or family history of colon or breast cancer, family history of hereditary malignant syndrome (ovarian, breast, Lynch II families in which ovarian and

colon cancer), history of use prolonged periods of ovulation, non-use of oral contraceptives, nulliparity, advanced age, exposure to talc and asbestos (1).

Early detection methods include: clinical examination, abdominal and transvaginal ultrasound, CA 125 antigen determination, BRCA 1 and BRCA oncogenes determination, risk group identification, ROMA score (this is not a diagnostic test but a stratification tool for patients with pelvic tumor in the low risk or increased risk group of epithelial ovarian cancer in surgery).

Surgical treatment: coding of cytoreduction operations. It's a difficult thing, but many authors

distinguished :

- optimal surgery (no visible macroscopic tumor residue);
- almost optimal surgery (residues not exceeding 1.5 cm diameter);
- suboptimal surgery ( voluminous residue).

In stages I and II: tumor proliferation is limited to ovaries or pelvic structures. Standard surgery is total hysterectomy with bilateral anexectomy + omentectomy + pelvic peritonectomy (2,3).

In stages III and IV: extension above the upper pelvic strain to the large peritoneal cavity. Unfortunately, these severity extremes are the most numerous in practice (60-80%). Optimal reduction can only be achieved at the expense of large, laborious extensions. Indeed, it is less common that total hysterectomy with bilateral anexectomy, omentectomy, and peritoneal resection, more or less extensive, give the expected results (3).

### **Case Presentation 1**

The 76-year-old retired from work, in the urban area who had been hospitalized in the Surgery Clinic by Emergency Service for diffuse abdominal pain that occurred two days ago - progressively accentuated, as well as for the presence of a pseudotumoral formation located on the level of the mesogastru, paramedian left, which has gradually increased in size and has not been reduced for 2 days, which is why it is hospitalized for diagnosis and specialized treatment. From the history of the condition, we note that the current suffering is about 4 years old, when it suddenly started with a physical effort, associated with weight gain and the non-use of a belly belt (contrary to the physician's indication), later the symptomatology evolved by increasing in size and impossibility of taxis reduction in the last 2 days, associated with increasing

intensity pain, until the time of presentation in the emergency service. The abdomino-pelvic CT reveals the following significant diagnostic elements: oval shaped, fluid density, relatively thin, uniform, discrete iodophilic wall, having an axial dimension of 124/105 mm, located in the projection area of the straight annex that associates the turgescient ovarian vessels on the same side.

Iterative incision, with excision of the old scar, prolonged caudal necessity. There are four sacking bags, which are dissected, opened and found to be epiploon-modified, with hemorrhagic infiltrations (for which partial epiploonectomy is practiced). The joints are joined, the sutures are resected, and the peritoneal cavity is opened widely, where the presence of a generalized sero-hematic peritonitis is observed, from which it is harvested and sent to the cytological and bacteriological examination and the rest is aspirated. The right ovary is cystic and torsionally transformed, which is why right annexectomy is practiced (the histopathological result being serotype of chistadeno-carcinoma).



Figure 2

- particularity of the case lies in the coexistence of two injuries requiring emergency surgery, both credited as the cause of "acute surgical abdomen".
- "the mirage of the first lesion" existed, the initial tendency was to approach

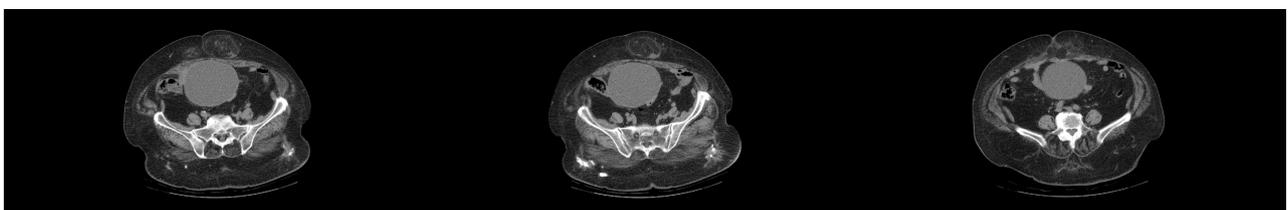


Figure 1

the case only through a complication of a parietal abdominal defect, but computer tomography raised suspicion and a coexisting lesion, namely ovary torsion (expressed by turgescient ovarian vessels).

## Case Presentation 2

Patient aged 28 years in urban areas, which shows the urgency with fecal vomiting, lack of fecals transit about four days. The clinical examination and paraclinical explorations make the diagnosis of giant pelvic tumor and intestinal occlusion.

A pelvic tumor mass with an ovarian starting point, as well as a recto-sigmoid junctional tumor, multiple pelvic, epiploic, peritoneal metastases occur, thus initially practicing antacidectomy, followed by total hysterectomy with anexectomy, lymphadenectomy pelvic up to the aortic bifurcation, omentectomy resection rectosigmoidian to Hartmann, minimal excision of pelvic metastases. (peritoneal carcinomatosis, Kruckenberg tumor with rectosigmoid localization).

## Case presentation 3:

The 36-year-old patient is hospitalized by transfer from the Orthopedics Section where she was hospitalized and treated surgically for femoral neck fracture. Subsequent investigations lead to the fact that the fracture is on the pathological bone (metastasis) and it detects a pelvic mass. Surgical, laparoscopic surgery is performed and an ovarian tumor is excised, which is excised and sent to histopathological extemporaneous examination, resulting in serum adenocarcinoma. The intervention is limited to this intervention, the patient refusing radical surgery both initially and subsequently.



Figure 3

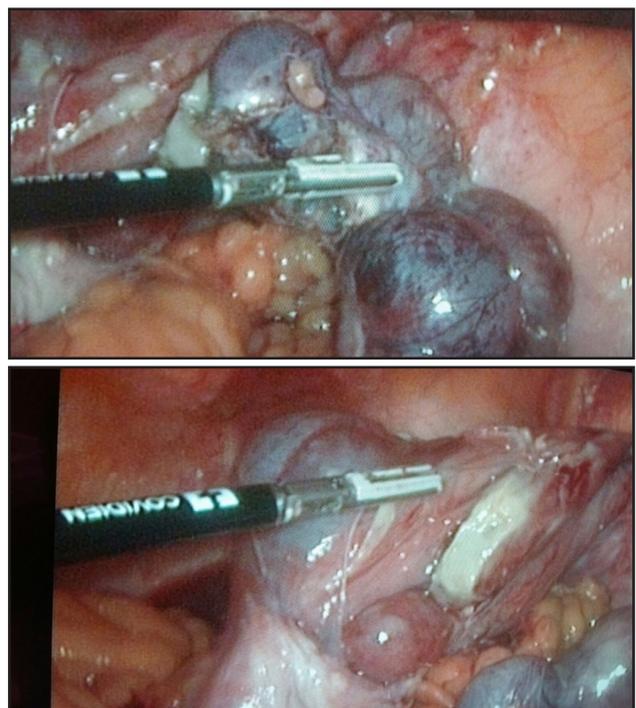


Figure 4

## Discussion

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As previously mentioned, ovarian cancer has the worst prognosis of all genital cancers (15-40% oncology survival at 5 years). The borderline tumors (LMP) - slowly-diagnosed and timed out cancers are perfectly curable (survival 100%). Regarding epithelial malignant tumors (adenocarcinomas), the most important prognostic factors are: residual volume, malignancy grading, FIGO clinical stadium, histological type, extraovarian extensivity (4).

The prognosis is all the more serious because 90% of ovarian cancers are adenocarcinomas and about 65% of them are diagnosed in advanced stages (III and IV). The tumor volume and subsequently the residual volume above 15 mm, after suboptimal surgery, give the worst prognosis. Malignancy Grades II and III are also prognostic factors of severity. Likewise stages III and IV, poorly differentiated and undifferentiated serological histological types, unclassified forms. Even at the second-look laparotomy on negative histological samples, the risk of relapse reaches 40% (5, 6).

Combating ovarian cancer and increasing survival chances can only be achieved through early detection of high risk groups after 30 years of age (clinical examination, ultrasound, tumor markers, oral hormonal contraception, pelviscopic or classical surgery, adjuvant treatments) For the prospect, it is envisaged to reduce mortality by applying appropriate protocols (currently under multicentre research) following the following principles:

- assessment of the impact of the debulking surgery on the first intention and the secondary debulking;
- intensification of first-line chemotherapy;
- conduct following full histological remission;
- indications and ways of combining adjunctive treatments in Stages I and II;
- the discovery of new cytotoxic agents;
- place of biological behavior modulators (glutathione, glycoprotein P-170, interleukin II,  $\gamma$  interferon, TNF, LAK, G-CSF, medullary autografts);
- the possibilities of substitution hormone

therapy;

- application of less invasive surveillance methods (3D ultrasound and power Doppler, computer tomography, immunoscintigraphy, MRI, endoscopy, BRCA 1 and BRCA 2 oncogenes research, CA 125, CA 19-9, CA 15-3, use of wide scale of the ROMA score) (1).

Future advances in ovarian cancer depend on experimental therapies (Signal Transduction Inhibitors, Metalloproteinase Inhibitors, Immunotherapy, Intraperitoneal Gene Therapy). These agents are likely to be used in the future in combination with conventional chemotherapy, but early detection is also necessary as we see an increasing frequency of accidental discovery of this disease in advanced stages when the prognosis is reserved.

## References

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1. Angelescu N. *Tratat de patologie chirurgicală. Editura Medicală. 2003. p.3099-3122, p.3025-3037*
2. Piver MS. *Ovarian Malignancies: Diagnostic and Therapeutic Advances: Churchill Livingstone; 1987. p. 245-297*
3. Dargent D. *Principles and practice of gynecologic oncology: Lippincot Williams&Wilkins; 1992. p 269-289, 381-463*
4. Turculeanu A, Balasoiu M, Avramescu C, Danciulescu M, Lungulescu M. *Cacnerul ovarian - actualitati si perspective EMCB Educatie medicala continua2004 [updated 25.12.2004; cited 2017. Available from: <https://www.emcb.ro/article.php?story=20041124202022544>.*
5. Dorval T. *Cytokines and Cytokine Receptors. Physiology and Pathological Disorders: Taylor&Francis e-Library; 2005*
6. Di Saia PJ, Creasman WT. *Clinical Gynecologic Oncology: Elsevier/Saunders; 2012.*