# Primary fallopian tube carcinoma – case report

## V. Pažin<sup>1,2</sup>, A. Dobrosavljevic<sup>2</sup>, L. Nejkovic<sup>1,2</sup>

<sup>1</sup>Medical faculty University of Belgrade, Belgrade <sup>2</sup>Clinic of Obstetrics and Gynecology "Narodni Front", Belgrade (Serbia)

#### **Summary**

Primary fallopian tube carcinoma is a rare gynecological malignancy and it accounts for about 1% of all gynecological malignancies. Etiological factors are not sufficiently known, but most commonly specified are infertility, nulliparity, and pelvic inflammatory disorder. It is most often asymptomatic, although, a triad reported by Latzko including a vaginal watery discharge, colic like pelvic pain, presence of tumor mass in pelvis, is mentioned as pathognomonic. In the present case, it was primary fallopian tube carcinoma, in FIGO Stage IA. After complete abdominal hysterectomy with lymph node dissection, in line with the expert council's decision, no adjuvant chemotherapy was administered. PET CT in June 2017, two years after the surgical treatment, presented both some metastatic changes in lungs and enlarged retroperitoneal lymph nodes and after this finding, and chemotherapy with carboplatin was begun. The therapy implies surgical treatment being hysterectomy with adnexectomy, but also retroperitoneal lymph node dissection as well, considering that it more often affects lymphatic glands than epithelial ovarian cancer (EOC). It can be misinterpreted with EOC in a pathological sense. In addition to a surgical treatment, the most common form of chemotherapy is platinum-combined with taxanes.

Key words: Fallopian tube carcinoma; Epithelial ovarian cancer, Pelvic inflammatory disorder; Chemotherapy; Platinum; Taxanes.

#### Introduction

Primary fallopian tube carcinoma (PFTC) is a rather rare gynecological malignancy with an incidence in which, according to the literature data, ranges from 0.14–1.8%. An average age when it occurs is about 55-years-old. It is likely that the incidence is higher, namely that some cases are overlooked due to pathohistological overlapping with epithelial ovarian carcinoma (EOC) of serous type or with primary peritoneal serous cancer [1, 2]. Possible etiological factors include nulliparity, as well as previous pelvic inflammatory disorders [3]. An optimum approach for treating PFTC has not yet been established, primarily due to rarity of this illness. A treatment is guided by the same principles related to EOC.

### **Case Report**

A patient, 49-years-old, G0 P0 came for examination due to pelvic pains. In the anamnesis, she reported that she had been treated for an inflammatory process in the pelvis. During bimanual pelvic examination, tumefaction in the area of left adnexa was palpated. Adnexa and parametrium were pain sensitive on both sides. Colposcopy viewed AW epithelium with high intensity and leukoplakia, while PA test result was regular. Cervical biopsy, endocervical curettage, and curettage of uterine cavum were all performed (histopathological result: cervicitis chronica gravis). Ultrasonography viewed tumefaction in the area of the left adnexa, dimensions 67×38 mm, with cauliflower-like growth within lumen having low resistance (Ri 0,40) (Figure 1). Ultrasonography of the abdomen did not find any pathological changes. Tumor markers were moderately increased: Ca 125-53.2 U/ml (reference

value up to 35 U/ml) HE 4-86 pmol/L, and ROMA index 36.8. CT result implied presence of the left ovarian tumor, with dimensions 67.3×32.9 mm, with partially solid and partially cystic structure, without enlarged retroperitoneal lymphatic glands both in iliac area and para-aortically. After having been adequately prepared, the patient was presented to the expert council for malignant diseases where an exploratory laparotomy was decided to be performed and to act as per the protocol for ovarian cancer under a diagnosis for left ovarian cancer. Medial laparotomy was executed followed by total abdominal hysterectomy with adnexectomy on both sides, lymph node dissection, as well as with infracolic omentectomy. Intraoperative procedure found highly dilated oviduct on the left, while oviduct on the right appeared without significant changes (Figures 2A and 2B). Both ovaries where clearly separated from the tumor mass. Histopathological analysis found that this is primary serous papillary adenocarcinoma of the fallopian tube was FIGO Stage IA. (Figure 3) The patient was not advised to have adjuvant chemotherapy considering this was FIGO Stage IA of the disease and therefore she was referred to regular follow-ups. In June 2017, two years after the



Figure 1. — Ultrasonography view of tumefaction of the left adnexa, being both partially solid and partly cystic in structure.

Published: 10 February 2019

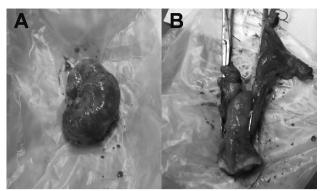


Figure 2. — A) Left fallopian tube. B) Uterus with the left ovary and right adnexae.

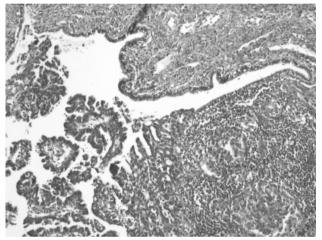


Figure 3. — Histopathological finding of serous papillary adenocarcinoma of the fallopian tube.

perioperative treatment, PET CT presented both some metastatic changes in lungs and enlarged retroperitoneal lymph nodes and after this finding, the expert council decided that chemotherapy with carboplatin should be used and this therapy is being administered to the patient.

## Discussion

PFTC is rather rare. In most of these patients, infertility, pelvic inflammatory disorder, and nulliparity stand out as possible etiological factors, as is the case with the present patient. [4, 5] Most patients do not have any symptoms. The clinical triad, reported by Latzko in 1916, of a vaginal watery discharge, colic like pelvic pain, presence of tumor mass in pelvis occur relatively rarely, and these were described in less than 15% of cases [6]. A pathognomonic sign is hydrops tubae profluens. It is characterized with intermittent colic like pain being a result of the fallopian tube distension, which is relieved when vaginal watery discharge occurs. The study which analyzed 27 PFTCs ob-

tained a result that only 11% of patients had characteristic signs. [7] Although classic triad of symptoms is described and pathognomonic, correct preoperative diagnosis was made in only 4% of cases [8]. Most often, either ovarian cancer is the first diagnosis, which was the case with the present patient, or tubo-ovarian inflammatory process. Various imaging techniques, such as ultrasonography and CT, i.e. MRI: all these hardly differentiate this entity separately in comparison to EOC. It is difficult to differentiate PFTC from EOC both clinically and histopathologically. Serous adenocarcinoma is the most common pathohistological diagnosis of PFTC. In order to make a correct diagnosis of PFTC, it is necessary that the following histopathological criteria are met: (a) the tumor originates from endosalpinx, (b) histological pattern should produce the epithelium of tubal mucosa, (c) if the fallopian tube wall is affected, it is necessary to identify proliferation from benign to malignant change, and (d) ovaries and endometrium should remain unchanged or with a tumor which is smaller than the tumor in the tube. At present, there are few data which would recommend an optimum treatment for this disorder. This is primarily a result of lack of control studies, and which is a consequence of the low incidence of this malignancy. The most common chemotherapy includes combination of the platinum-taxane regimen [9]. In total, five-year survival rate is low, and it is only 50% on average in comparison to ovarian cancer where this percentage is more than 70%. PFTC is rarely diagnosed in the early stage of this disorder, and the role of the routine lymph node dissection is confirmed as necessary during staging of the disorder [10].

Much greater studies are necessary for defining etiology, as well for assessing diagnostic and prognostic markers.

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Corresponding Author:
A. DOBROSAVLJEVIC M.D.
Clinic of Obstetrics and Gynecology "Narodni Front"
Kraljice Natalije 62
Belgrade (Serbia)
e-mail: dobrosavljevical@gmail.com