Primary carcinoma of the fallopian tube mimicking tubo-ovarian abscess

F. F. Verit, *M.D.*; **H. Kafali,** *M.D.*

Department of Obstetrics & Gynaecology, Harran University, School of Medicine, Sanliurfa (Turkey)

Summary

Purpose: The aim of the study is to report that the primary fallopian tube cancer can be presented as a tubo-ovarian abscess preoperatively.

Methods: A patient with a preoperative diagnosis of a tubo-ovarian abscess with abdominal pain, tenderness and an elevated fever with leukocytes underwent urgent exploratory laparotomy.

Results: Explorative laparotomy and accompanied frozen section revealed a right-sided tubal carcinoma. There was an inflammatory and purulent reaction in the tube that was adherent to the anterior uterus. Total hysterectomy and bilateral salpingo-oophorectomy were performed.

Conclusion: Carcinoma of the fallopian tube should be considered in the differential diagnosis of acute pelvic peritonitis like a tubo-ovarian abscess.

Key words: Fallopian tube carcinoma; Tubo-ovarian abscess; Adnexal mass.

Introduction

Primary carcinoma of fallopian tube is extremely rare, accounting for 0.18 to 1.6% of all malignant neoplasms of the female reproductive tract [1]. The classic triad of symptoms and signs associated with fallopian cancer are prominent watery vaginal discharge, pelvic pain and pelvic mass. Although pelvic pain is the most common symptom, it is not yet considered in the differential diagnosis of pelvic inflammatory disease or tubo-ovarian abscess [1-3].

To our knowledge this is the first case in the English literature of a primary carcinoma of the fallopian tube that was diagnosed as a tubo-ovarian abscess at the initial evaluation.

Case

A 55-year-old woman, gravida 0, para 0, diagnosed with primary unexplained infertility before, was admitted to our hospital because of severe lower abdominal pain. At physical examination she had a temperature of 38°C, blood pressure of 130/80 mmHg and pulse rate of 92 beats per minute. Bilateral lower quadrant tenderness with rebound was positive on abdominal examination. She had a cervical motion and adnexal tenderness on pelvic examination. Transvaginal ultrasonography (USG) revealed a bilateral 36 x 23 mm and 29 x 23 mm adnexal mass with a hypoechogenic pattern and computerized tomography defined a 3 cm hypoechogenic cyst located in the anterior uterine wall; both indicated a tubo-ovarian abscess. Her white cell count was 16.8 x 10^9/l with absolute neutrophilia and bands. In order to elucidate ovarian neoplasmia, tumor markers were studied. CEA, CA15-3, CA19-9 were within the normal range, but CA125 was elevated to 66.80 U/ml. During the laboratory and radiologic assays, paranteral antibiotics, ceftriaxone sodium 2 x 1 g IV and metronidazol 2 x 1 g IV, were given.

The patient was taken to the operating room with the preoperative diagnosis of tubo-ovarian abscess. At laparotomy an inflammatory and purulent 8 x 4 x 2 cm right adnexa adhering to the anterior uterine wall was observed. The uterus and left tube were normal under macroscopic examination. Histological examination showed a grade 3 undifferentiated serous carcinoma limited to the right tube with extension to the muscularis, but not to the serosa and the left tube had chronic inflammation. The endometrium was atrophic. A total hysterectomy with bilateral salpingo-oophorectomy with omentectomy, appendectomy and pelvic lymph adenectomy was performed.

Discussion

Primary carcinoma of the fallopian tube is one of the rarest gynecological malignancies. Low parity or infertility and chronic salpingitis have often been associated with this malignancy. The median age for the malignancy has been reported to be between 52-61.8 years.

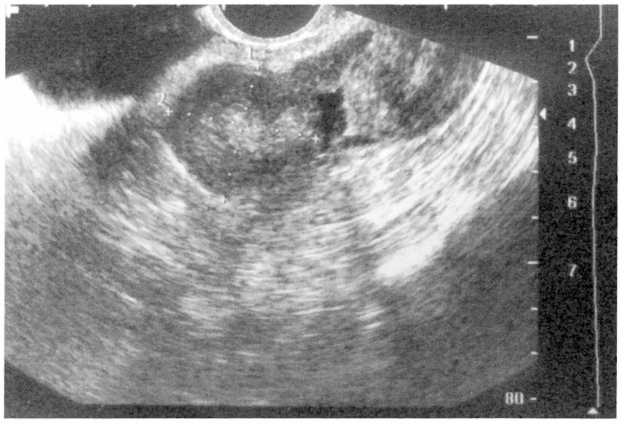

Figure 1. — Preoperative ultrasonography revealed primary fallopian tube carcinoma mimicking a tubo-ovarian abscess.

Revised manuscript accepted for publication October 6, 2004

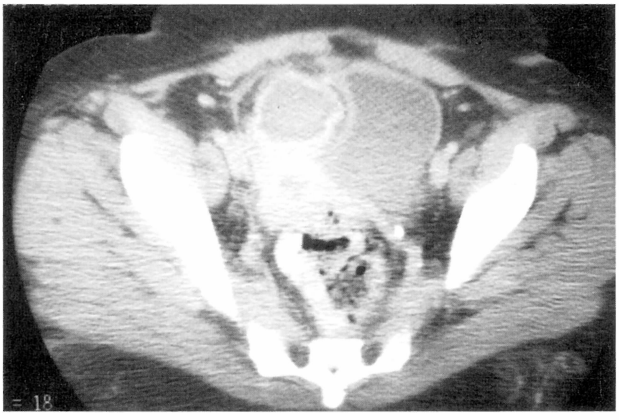

Figure 2. — Abscess-like appearance of primary fallopian tube carcinoma by computerized tomography.

The patient presented with abdominal pain and tenderness together with leukocytosis and fever, suggestive of a tubo-ovarian mass. This clinical situation however has been poorly described in the literature. Kurjak *et al.* have reported cases of fallopian tube carcinoma as complex, cystic adnexal masses, but the clinical description is only partial [2].

Vaginal bleeding or watery discharge, and abdominal distension or mass, abdominal or pelvic pain are the most common symptoms of the disease [1-4]. The symptom complex of "hydrops tubae profluence" or "Lastko's" triad is said to be pathognomonic for this tumor. However these are rarely encountered [5]. This definition consists of an intermittent, colicky pain relieved by sudden discharge per the vagina of watery fluid rich in cholesterol and followed by a decrease of the abdominal mass size.

Because of its low incidence and non characteristic symptoms or pathognomonic features, preoperative diagnosis is difficult. Studies like ultrasonography USG, hysterosalpingography or cervicovaginal cytology and laboratory tests like tumor markers are not specific data in the diagnosis [2, 6].

In conclusion, in this case we want to stress that primary tubal carcinoma can mimic the clinical findings of acute peritonitis or tubo-ovarian abscess. Tubal carcinoma should be taken into account in the differential diagnosis of suspicious adnexal masses with elevated CA125 levels as well as ovarian malignancies in the preoperative period.

References

[1] Nordin A.J.: "Primary carcinoma of the fallopian tube: a 20-year literature review". *Obstet. Gynecol. Surv.*, 1994, *49*, 349.

[2] Kurjak A., Kupesic S., Ilijas M., Sparac V., Kosuta D.: "Preoperative diagnosis of primary fallopian tube carcinoma". *Gynecol. Oncol.*, 1998, *68*, 29.

[3] Romagosa C., Torne A., Iglesias X., Cardesa A., Ordi J.: "Carcinoma of the fallopian tube presenting as acute pelvic inflammatory disease". *Gynecol. Oncol.*, 2003, *89*, 181.

[4] Navani S.S., Alvaro-Caballero I., Young R.H., Scully R.E.: "Endomatrioid carcinoma of the fallopian tube: a clinicopathologic analysis of 26 cases". *Gynecol. Oncol.*, 1996, *63*, 371.

[5] Alvarado-Caballero I., Young R.H., Vamvakas E.C., Scully R.E.: "Carcinoma of the fallopian tube: A clinico-pathological study of 105 cases with observations on staging and prognostic factors". *Gynecol. Oncol.*, 1999, *72*, 367.

[6] Wenzl R., Lehner R., Drager M., Jirecek S., Gamper C., Sevelda P.: "Unsuspected primary carcinoma during operative laparoscopy". *Gynecol. Oncol.*, 1998, *68*, 240.

Address reprint requests to:
F. F. VERIT, M.D.
Harran University School of Medicine
Tip Fakultesi Hastanesi
Tr-63100 Sanliurfa (Turkey)