Fallopian tube carcinoma: incidental finding during surgery for acute pelvic inflammatory disease - case report

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Summary

Background: Primary carcinoma of the fallopian tube is a rare condition. Preoperative diagnosis is difficult and in most cases it is an intraoperative finding or a histopathological diagnosis.

Case: A 49-year-old woman presented with pelvic pain, fever (38°C), elevated white blood cell count and a right adnexal mass. Pelvic inflammatory disease was suspected and broad spectrum antibiotics were established. Five days later, due to lack of clinical response, a total abdominal hysterectomy, bilateral salpingo-oophorectomy and appendectomy were performed. Histopathology showed a primary fallopian tube carcinoma. Postoperatively she received chemotherapy. Afterwards she underwent a staging laparotomy. Some months later, new chemotherapy regimens were instituted because of the presence of lymph node metastases.

Conclusion: Malignancy should be included in the differential diagnosis of pelvic inflammatory disease.

Key words: Fallopian tube; Carcinoma; Pelvic inflammatory disease; Adnexal mass; Laparotomy.

Introduction

Fallopian tube carcinoma is a rare neoplasm which accounts for 0.18 to 1.6% of primary gynecological cancers. The majority of patients present with serous adenocarcinoma and despite the use of surgery and adjuvant therapy the prognosis is still poor [1]. The commonest presenting symptoms are vaginal bleeding or leucorrhoea, abdominal pain and palpable adnexal mass [2].

Case Report

A 49-year-old, gravida 3, para 3, premenopausal woman was admitted to the emergency department of our hospital because of severe pelvic pain, nausea and emesis. She was an intrauterine device (IUD) user.

Physical examination showed a right adnexal mass of 10 cm. White cell count on admission was $19x10^9/l$ with absolute neutrophilia and the axillary body temperature was 38°C; the IUD was removed. Transvaginal sonography revealed a 13 x 5 x 5 cm sausage-shaped cystic structure in the right adnexal region and according to imaging and clinical data pyosalpinx was suspected, and the patient was treated with intravenous antibiotics (metronidazole and gentamycin). Though initial response was favorable, 72 hours after beginning antibiotic therapy abdominal pain became acute again, leukocyte blood count was $23x10^9$ /l and the body temperature was 39°C. Computerized tomography (CT) scan showed a well delimited cystic adnexal mass of 13 x 5 x 5 cm. These findings combined with clinical behavior were highly suspicious of a right adnexal abscess.

The patient underwent total abdominal hysterectomy with bilateral salpingo-oophorectomy and appendectomy. Histopathological study of the specimen revealed a serous primary adenocarcinoma of the fallopian tube with papillary features, extensive necrosis and surrounding fibropurulent peritonitis. There were two microscopic implants of adenocarcinoma in the appendix and the case was allocated to FIGO Stage III.

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The patient had postoperative adjuvant therapy with taxol and carboplatine. After three cycles complete surgical staging was performed and histology revealed no residual tumor. Postoperatively the patient received three more cycles of chemotherapy.

Eleven months after initial surgery serum CA125 increased (352 mU/ml) again but the CT scan was normal. Positron emission tomography (PET) revealed five focal images with pathologic uptake in the retroperitoneum (mainly in the left paraaortic area) up to 2 cm size, suggesting metastatic disease (see Figure). Additional therapy with carboplatin was instituted (total amount 6 cycles). Though initially lymph node metastases and serum CA125 remain unchanging, five months later PET demonstrated a greater size accompanied by a serum CA125 of 680 mU/ml; a new chemotherapy regimen was instituted based on eight cycles of liposomal doxorubicin. One year later serum CA125 concentration and lymph node metastasis size remained stabilized, and six months later the patient was lost to follow-up.

Discussion

The diagnosis of primary carcinoma of the fallopian tube is rarely suspected prior to surgical exploration due to the rarity of this condition and to the lack of specific symptoms [3]. Our patient was younger than usually referred and the symptoms she presented were not common [4] and moreover, she was an IUD user. This clinical behavior is uncommon and not usually identified in large series [5, 6].

When fallopian tube carcinoma is a postoperative histopathological finding, as occurred in this case, a proper surgical procedure should be performed to avoid understaging and ultimately, undertreatment. Residual disease after surgical resection and advanced surgical stage appear to be poor prognostic factors.

This case report also points out that CA125 measurements combined with a CT scan seems to be useful in predicting recurrence. It also suggests that PET is a sen-

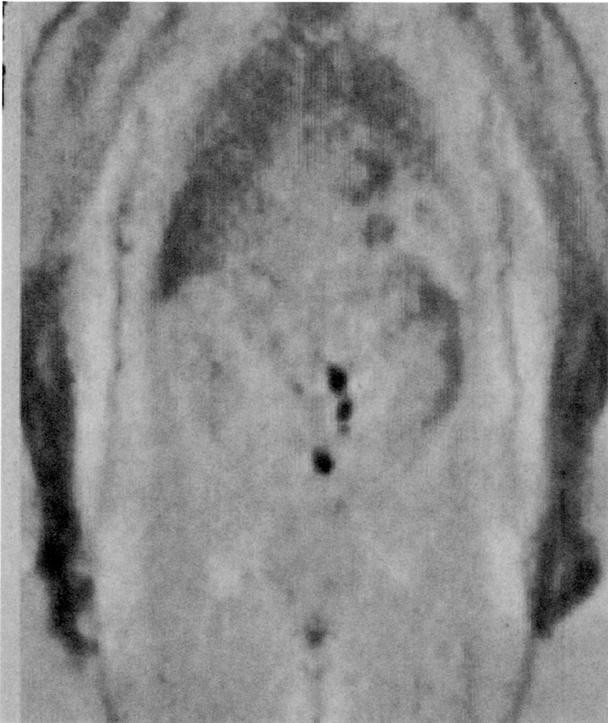

Figure 1. — Positron emission tomography showing five focal images in the retroperitoneum with pathologic uptake (maximum standardized uptake value - SUV max- 11.9).

sitive and accurate method for detection of metastatic disease when CT is unable to detect recurrence.

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