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A pT1c fallopian tube carcinosarcoma: a case report

F. Lai-Tiong

Oncology Unit Gard Cancer Institute, Nîmes (France)

Summary

Carcinosarcomas of the fallopian tube are extremely rare tumors with poor prognosis. They are more frequent in women in the fifth or sixth decade and often revealed by abdominal pain or gynecological bleeding. The author reports the rare case of a 73-year-old women presenting with post-menopausal gynecological intermittent bleeding for two months. Ultrasonography and MRI showed a four-cm heterogeneous right annexial mass. Right annexectomy by laparoscopy showed a malignant tumor. The patient underwent total hysterectomy, a bilateral salpingo-oophorectomy, appendectomy, omentectomy, and pelvic and lombo-aortic lymph node dissections. Pathologic diagnosis revealed a non-heterologous carcinosarcoma arising from the right fallopian tube: pT1c N0, FIGO Stage IC. Six cycles of adjuvant chemotherapy paclitaxel+carboplatin were decided. Computed tomography scan after three cycles did not show any sign of recurrence. The patient is following chemotherapy. Because fallopian tube carcinomas are a very rare disease, no standard therapy exists. Data from many institutions may improve knowledge and management.

Key words: Fallopian tube carcinosarcoma; Chemotherapy; Platinium-based chemotherapy; Rare tumor; Gynecological bleeding.

Introduction

Carcinosarcoma of the fallopian tube is extremely rare and the therapeutic prognosis of this disease is unknown. These tumors occur in the endometrium, vagina, uterus, cervix, and ovaries. Carcinosarcomas of fallopian tube comprise only 4% of all carcinosarcomas and 2.4% of all malignant fallopian tube neoplasms [1]. Because of its rarity, no standard therapy exists. It has been recommended that each case be reported [2].

The author reports the rare case of a carcinosarcoma of the right fallopian tube occurring in a 73-year-old female.

Case Report

The patient was a 73-year-old Caucasian woman, gravida 1, para 1 without any medical past, only hypertension. She underwent menopause at 58 years and had taken oral contraceptives for 26 years. She presented to the Department of Gynecology with the chief complaint of atypical genital pale pink bleeding that had continued for about two months. Physical examination was normal. Ultrasonography showed a right adnexal 40-mm mass.

Magnetic resonance imaging confirmed the presence of a 44 ×31×39 mm, inflammatory, and heterogeneous mass in the right ovarian site (Figure 1). Pathologic lymph nodes were not found and the uterus was not suspected. Ca125 was normal at 35 kU/L (normal range < 25). Blood tests and hepatic and renal functions were normal. The patient underwent exploratory coelioscopy that was in favour of carcinoma. The surgery was converted in a laparotomy. Total hysterectomy, bilateral salpingo-oophorectomy, appendectomy, and large pelvic and latero-aortic node dissection was performed. Pathologic diagnosis revealed a non-heterologous carcinosarcoma arising from the right fallopian tube.

Gross observation showed the right fallopian tube measuring seven cm with a three-cm tumor segment. Right ovary was 1.8×1×0.6 cm and macroscopically normal. Tumor fragments were measuring one to six cm.

Histology demonstrated both a component of serous carcinoma and sarcomatous without heterologous component. Microscopically, the omentum, left oviduct and left ovary, uterus, and bilateral lymph nodes were negative for malignancy. Fluid cytology was negative for malignant cells. Pathologic stage was pT1c (TNM staging); FIGO Stage IC .

Immunohistochemical analysis revealed the epithelial component to be positive for CK7 and WT1. It was negative for CK20 and CDX2. Sarcomatous component was comprised of round cells with nuclear atypia and numerous mitosis. No heterologous differentiation was present. Vimentin was strongly positive and pan CK AE1/AE3 was present in foci. Both stromal and epithelial components were negative for hormonal receptors and p53. Ki67 was high at 70% for both components.

The patient was referred to an expert centre and it was decided to follow with six cycles of adjuvant chemotherapy consisting of paclitaxel 175 mg/m² plus carboplatin 5 AUC. The patient underwent three cycles of chemotherapy. The CT scan after showed no sign of recurrence.

Discussion

Carcinosarcomas of the fallopian tube are extremely rare tumors. They are more frequent in uterus and ovary. About 80 cases of carcinosarcomas have been compiled from the world [3]. These tumors are so rare that no guideline about the adjuvant treatment exists.

These tumors usually occur in post-menopausal women, in the fifth or sixth decades. The most common symptoms are abdominal pain, atypical vaginal bleeding, or abdomi-

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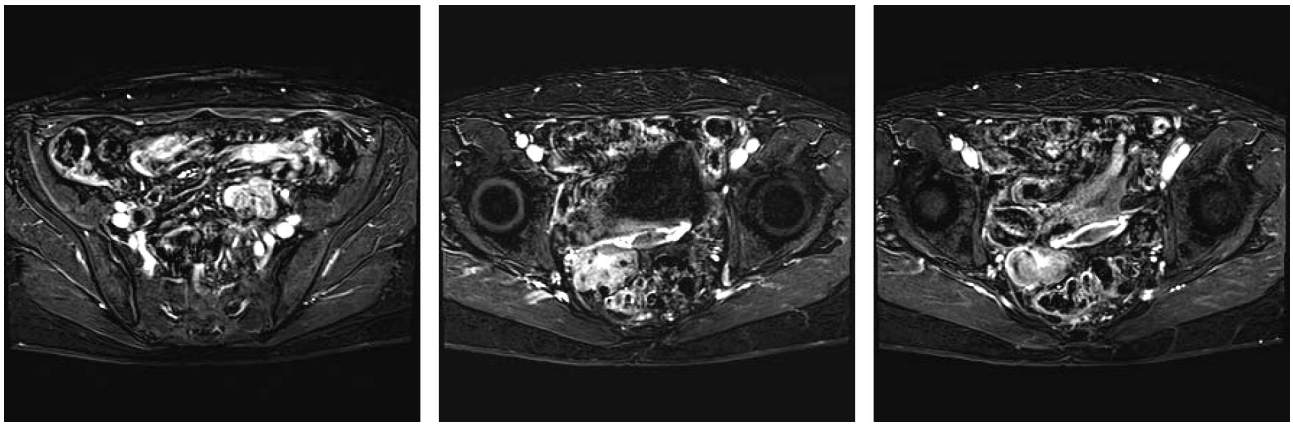

Figure 1. — Presurgical MRI showing a 44×31×39 mm inflammatory and heterogeneous mass in the right ovarian site.

nal distension.

These malignancies are more often aggressive and revealed at a later stage. They are composed of both epithelial and stromal elements. In the literature homologous cases are more frequent. Among heterologous cases the components were chondrosarcoma, rhabdomyosarcoma, and osteosarcoma.

The etiology of primary fallopian tube tumors is unknown. Multiparity seems to be protective [4]. Pregnancies and oral contraceptives decrease the risk [5].

Demographic distribution is similar to ovarian cancer and the highest incidence was found in white, non-Hispanic women and women aged 60-79 years. Stewart *et al.* found an incidence rate of 0.41 per 100.000 women [6].

Symptoms are very diffuse. The Latzko triad of symptoms: intermittent profuse seroanginous vaginal discharge, colicky pain relieved by discharge, abdominal or pelvic mass, is reported in only 15% of all patients [7].

In 80% of the advanced stages, peritoneal metastases occur. Fallopian tube carcinomas show frequent expression of Ca125 [8]. In the literature, only two adenosarcomas have been described in the fallopian tube [9].

On immunohistochemical staining cytokeratin and vimentin or SMA is the gold standard for the diagnosis. On imaging carcinosarcomas MRI could be used over CT for the diagnosis. PET-CT + Ca125 and physical examination could be superior to CT alone in case of recurrence.

The therapeutic treatment consists in surgery. Chemotherapy and radiotherapy or chemoradiotherapy seem to be effective. A large number of reports of cured carcinosarcoma using cyclophosphamide, doxorubicin, and cisplatin therapy have been published [10].

After 2000, paclitaxel + carboplatin or paclitaxel + cisplatin has been effective as post-operative treatment for carcinosarcoma of fallopian tube [11]. Results of studies suggest that chemoradiotherapy contributes to an improvement in the prognosis of carcinosarcomas [12].

The prognosis of these tumors is obviously poor compared with primary fallopian tube and ovarian cancers. Different therapeutic strategy is required.

Conclusion

Carcinosarcomas of fallopian tube are a rare tumor and associated with poor prognosis. Data from many institutions are needed to improve their future and to elaborate innovative therapies.

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Corresponding Author:
F. LAI-TIONG, M.D., Ph.D.
Oncology Unit Gard Cancer Institute
Rue du Professeur Henri Pujol
30900 Nîmes (France)
e-mail: florencelt@hotmail.fr