Primary fallopian tube carcinoma in a 51-year-old postmenopausal woman - case report

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Summary

The case of a 51-year-old woman with a primary carcinoma of the left fallopian tube is presented. Laparotomy performed for an ovarian tumour revealed that the patient had normal ovaries, but a left fallopian tube was dilated and filled with a tumour mass. Histopathological examination revealed primary adenosquamous cell carcinoma of the fallopian tube.

Key words: Fallopian tube carcinoma; Adenosquamous cell carcinoma; CA125 levels.

Introduction

Primary carcinoma of the fallopian tube is a rare malignant tumour of the female reproductive organs. It was first described by Renaud in 1847 [1]. Its incidence has been around 0.3% up to 1% of all malignant tumours of the female genitalia [2, 3]. Carcinoma of the fallopian tube has been more frequent as a secondary carcinoma, while the primary one includes ovarian, endometrial and breast cancer. It is most common in women between the age of 50 and 60, with the peak incidence around 55-60 years [4]. Risk factors for the occurrence of the carcinoma in question are unknown. About 42% of the women are nulliparous, and high parity has been considered to have a protective role [5]. The classic triad of symptomsand signs associated with fallopian tube carcinoma is a prominent watery vaginal discharge, pelvic pain and pelvic mass [2]. The diagnosis is most frequently postoperatively established, by histological analysis of the surgical material. The treatment involves surgery and chemotherapy, and in selected cases radiation therapy [6, 7]. The disease prognosis is poor.

Case Report

A 51-year-old patient, para 2, asymptomatic, was admitted to our clinic due to a tumour mass in the left adnexal region. She had previously been treated for pelvic inflammatory disease and underwent menopause five years before. Her weight was normal, with normal blood pressure and blood sugar levels. Laboratory blood and urine analyses, and lung X-ray and cardiogram were also normal. The Papanicolau smear from the cervix was within normal limits. Family history showed no evidence of malignancies. On vaginal examination, the uterus was atrophic and of solid consistency. In the left adnexal area there was a palpable mass. The right adnexal area was free. Transvaginal ultrasound detected a tumour mass in the left adnexal area, with solid and cystic components, 30 x 30 mm in diameter. It was discrete, away from the uterine wall. Tumour blood vessel flow was registered with a resistance index of 0.40. The uterus was 40 x 25 x 15 mm in size and the right ovary 18 x 10 mm. Ascitic fluid was found in the peritoneal cavity. A malignant left ovarian tumour was suspected. Ultrasound of the abdominal organs was normal. The pelvic and paraaortic lymph glands were not enlarged but CA125 tumour marker values were slightly elevated (58 mIU/ml).

The patient was subjected to exploratory laparotomy. The left tube was dilated in the ampullar area to the length of about 3 cm, and filled with a tumour mass. It was clearly discrete from the left ovary. The left ovary was 10 x 10 mm in size and of solid consistency. The uterus was small and atrophic. In the pelvic cavity about 100 ml of ascitic fluid was found. No suspicious areas were seen in the peritoneum. The patient underwent total abdominal hysterectomy along with bilateral salpingo-oophorectomy, infracolic omentectomy, appendectomy and pelvic lymphadenectomy. Ascitic fluid was taken for cytological analysis. The liver, spleen and stomach were palpated, and the intestines were visualised to look for suspicious areas but none were found. The final pathologic diagnosis was primary adenosquamous cell carcinoma of the left fallopian tube, limited to the tube. FIGO stage was considered as Ic and histologic grade was G_2 (Figure 1).

The uterus, left ovary, right adnexa, appendix, omentum, and pelvic lymph glands were without signs of malignancy. Cytological analysis of the ascitic fluid was negative. After the surgery, the patient received six courses of adjuvant chemotherapy with single-agent carboplatin. Six months after the applied therapy, abdominal CT and MRI of the small pelvis showed no signs of recurrence. The patient was in good general condition.

Discussion

Primary carcinoma of the fallopian tube is a rare malignant tumour. Out of all carcinomas of the female genitalia, it accounts for 0.3% to 1% [2, 3]. The incidence peak of the carcinoma is between the age of 55 and 60 years [4]. Our patient was 51 years old. Other authors have reported the average age of patients with fallopian tube cancer as 61.5 years and 69.6 years [8, 9]. In our patient's history there were two labours and two liveborn children. Predisposing factors for the occurrence of car-

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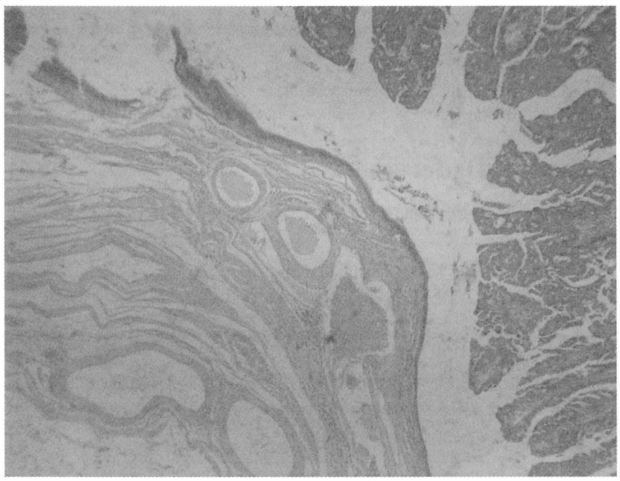

Figure 1. — Adenosquamous cell carcinoma of the fallopian tube.

cinoma are still unknown but the literature indicates that carcinoma of the fallopian tube is more frequent in nulliparous women 42% [5] and that about 5% of these patients have infertility problems as well [10]. Pelvic inflammatory diseases, pelvic tuberculosis and endometriosis have been reported as trigger factors [11]. The disease in our patient was asymptomatic. The most common signs or symptoms have been abnormal vaginal bleeding in 29% of cases and abnormal abdominal or pelvic mass in 26% of cases [8]. The classical triad of the disease symptoms has been abnormal vaginal haemorrhage, abdominal mass or distension and abnormal vaginal discharge [2]. The most common histological type of tubal carcinoma is adenocarcinoma in 45.9%, papillary adenocarcinoma in 27%, solid carcinoma in 8.1%, undifferentiated carcinoma in 5.4%, and others in 13.6% [7]. In 53% of cases of tubal carcinoma, serous papillary carcinoma of the fallopian tube was discovered [5]. In our case, adenosquamous cell carcinoma was diagnosed, moderately differentiated, with localisation in the ampullar tubal part, which is the most frequent localisation of the carcinoma. The tubal fimbria is a common site of origin for early serous carcinomas in women with familial BRCA 1 or 2 mutations [12, 13].

According to the FIGO classification [14], our case was in disease Stage Ic. At the time of disease detection, there were 45.9% of patients in Stage I, 18.9% in Stage II, 32.4% in Stage III and 2.7% in Stage IV [7]. Certain authors have reported that the disease was more frequently diagnosed in advanced stages, 49% in Stage III, 17% in Stage IV, 14% in Stage I and 20% in Stage II [8].

Preoperatively, the diagnosis of carcinoma of the fallopian tube is established only in 15% of cases [10]. The diagnosis is most frequently made by sample histological analysis, upon performed hysterectomy with bilateral salpingo-oophorectomy [15].

Ultrasound (US), laparoscopy, computerised tomography, magnetic resonance imaging and serum CA125 tumour marker level determination are useful in detection of this carcinoma. In our case, transvaginal US revealed a left adnexal tumour mass 30 x 30 mm in size. By applying colour Doppler, lower levels of resistence index were found (about 0.40). A malignant tumour of the left ovary was suspected. In many studies Doppler examination showed low vascular impedance and a resistance index of 0.50 [16], 0.29 to 0.40 [17], 0.20-0.30 [18] in carcinoma of the fallopian tube. The serum CA125 tumour marker concentration in our patient was elevated to 58 mU/ml. Other authors have reported that the serum CA125 level was markedly elevated [19]. The pretreatment serum CA125 level has been correlated with tumour stage but not with lymph node involvement, histologic grade or patient age [20].

Our patient was subjected to exploratory laparotomy. Total abdominal hysterectomy was performed with bilateral salpingo-oophorectomy, infracolic omentectomy, appendectomy and dissection of the pelvic lymph nodes. Ascitic fluid was cytologically analysed and there were no malignant cells found. Final histopathological diagnosis was primary adenosquamous cell carcinoma of the left fallopian tube, moderately differentiated. Upon surgical therapy, our patient received six courses adjuvant chemotherapy with single-agent carboplatin. Six months after the applied chemotherapy, gynaecological vaginal examination, abdominal CT and MRI of the small pelvis showed that there were no signs of recurrence in our patient. She was feeling well.

Disease prognosis for fallopian tube carcinoma is poor. A significant prognostic factor is the disease stage at the time of establishing diagnosis, histopathological tumour differentiation and metastases in dissected lymph nodes.

The five-year survival is approximatively 35%, but is much higher ranging up to 70% for Stage I disease [8]. Five-year survival falls to 60% if there is less than 50% penetration, and to less than 20% if there is deeper invasion [21].

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