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Primary Fallopian Tube Cancer – An Incidental Finding in a young Patient

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Primary fallopian tube cancer (PFTC) is rarest among gynecological malignancies.The prognosis of this malignancy is worst because of its presentation and diagnosis in advanced stage only. The symptoms of this malignancy are usually confused with pelvic inflammatory disease or ovarian malignancy. The preoperative diagnosis of PFTC is very rare and most patients with PFTC undergo laparotomy with the presumed diagnosis of ovarian tumor or tubo-ovarian mass. In the present study the patient underwent laparotomy for suspicious ovarian mass and later came out fallopian tube malignancy on frozen section. This case report is published to make the practitioner more aware about the existence of fallopian tube cancer and always to be kept in mind in young or perimenopausal patients who underwent laparotomy for suspicious tubo-ovarian mass. In the present patient only the frozen section analysis report revealed the malignancy not even the gross picture preoperatively

Keywords: Primary fallopian tube malignancy PFTC, Adenocarcinoma.

Introduction

Primary fallopian tube carcinoma is a rare gynecologic malignancy and accounts for 0.14 to1.8% of all female genital malignancies[1]. The 5 year survival in fallopian tube malignancy is 68-76% in stage 1 malignancy, 27-42% in stage 2 and 0-6% in stage 3 and 4. Stage of disease at the time of diagnosis determines the survival[2]. The majority (88%) of PFTCs are adenocarcinomas, of which 44% are serous adenocarcinoma type and 19% are endometriod type[3]. PFTC is often mistaken for benign pelvic disease or ovarian cancer. Accurate diagnosis is rarely achieved preoperatively and in many cases diagnosis is made after incidental surgery for unclear condition[4]. The present case report is also not an exception , here a 26 year old patient was taken for laparotomy for suspicious tuboovarian mass that came out as fallopian tube cancer.

Case Report

A 26 year old patient with three living children admitted in emergency with chief complaints of pain in abdomen in suprapubic area more on right side for 3 months. Pain was continuos type, spasmodic in nature and moderate to severe in intensity used to be relieved by medications only. There was no history of associated nausea and vomiting, fever with or without chills and rigors, bowel and bladder alterations and no history of weight loss. There was no history of any discharge per vagina or any menstrual problem. She was married for 10 years with three live children with no history of miscarriages.

She underwent minilap tubectomy 4 year back. She had no history of any chronic medical disease or any surgery. At the time of admission her vitals were stable with a BMI of 19 kg/m2 with mild pallor and no lymphadenopathy. Pelvic examination revealed healthy cervix and vagina ,with a 7into 6 cm size mass in right fornix with restricted motility and non tender uterus and left adnexa appeared normal. Sonography revealed a cystic mass of 5.7 into 6.3 cm in

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right adnexa with internal echoes, left adnexa and uterus was normal. Her CA125 was 309.81iu/ml.

Considering it an ovarian malignancy laparotomy was planned for the patient. Peroperatively, omentum was adherent to anterior uterine wall and mass. On further exploration a 5 into 6 cm size mass of varying consistency arising from right fallopian tube adherent to adjacent structures (Figure 1). Accidentally, it got ruptured during manipulation and cheesy exudate came out. The wall of cyst sent for frozen section and it revealed adenocarcinoma. Then total abdominal hysterectomy with bilateral oopherectomy with infracolic omentectomy and peritoneal biopsy done for the patient.

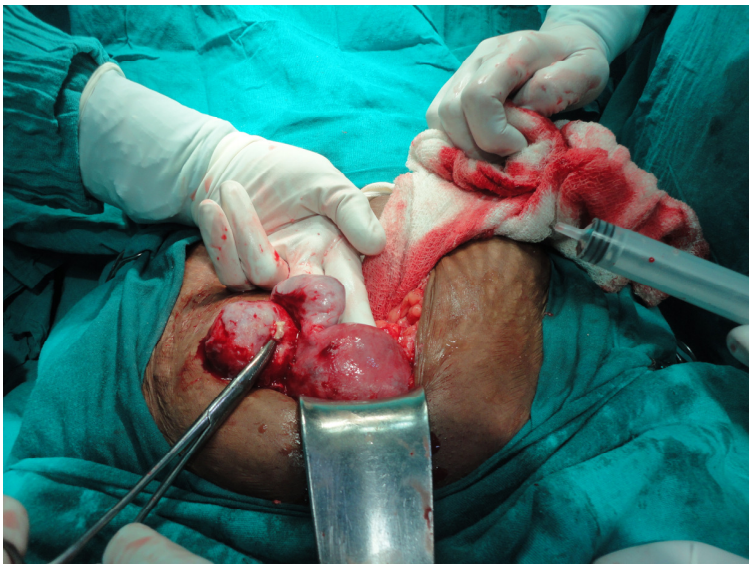

Figure 1. Operative photograph of patient showing enlarged tube and normal ovary

Histopathological examination revealed normal uterus and cervix right and left ovary and left fallopian tube. The right tubal tissue showed serous adenocarcinoma with invasion to muscular layer i.e. stage 1a according to FIGO. Omentum showed evidence of reactive hyperplasia. Patient was discharged after radiotherapy opinion. She was counseled about the disease she had and called for regular follow up in out patient.

Discussion

Primary fallopian tube carcinoma is a rare tumor that histologically and clinically resembles epithelial ovarian cancer[5]. Studies shows that PFTC most commonly occurs in postmenopausal women (63%) and mean age at diagnosis was 53 years(38-76)[6]. In the present case patient was 27 year old only. Nuliparity and infertility are high risk factors for the disease. Studies on animal suggest that progestagen induced apoptosis of transformed ovarian surface epithelial cells may underlie the observed protective effect of pregnancy on the risk of ovarian cancer .The endosalpingeal lining of the fallopian tube is hormonally active and the higher level of progestagens during pregnancy could lower the risk of PFTC by inducing apoptosis of transformed epithelial cells[3]. In the reported patient none of the risk factors were present .The

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patients usually presents with abnormal vaginal bleeding (47.5%), lower abdominal pain (39%), abnormal watery vaginal discharge (20%), and a palpable pelvic/abdominal mass(61%).

Hydrops tubae profluens is a syndrome that is characterized by intermittent colicky lower abdominal pain and this relived by a profuse, serous, watery, yellow discharge from the vagina. This is thought to be caused by filling and emptying of a partially blocked fallopian tube. This symptom usually occurs in 15% of patients only[5]. The pathogenesis of disease is obscure , and because of its rarity the preoperative diagnosis is rarely made and it is usually misdiagnosed as ovarian carcinoma. The present patient was also taken for laporotomy as an tubo ovarian mass secondary to endometriosis or tuberculosis or pelvic infection . Various diagnostic modalities include CA125 which is elevated in 65% of PFTC patients, and should be used in diagnosis and follow up of the disease[5]. Ultrasonography, CT SCAN and MRI can also be used to support the diagnosis. PFTC usually spreads by local invasion, transluminal migration and via lymphatic and blood stream. PFTC rapidly spreads to retroperitoneal lymph nodes. Surgery is the treatment of choice and the surgical principles are similar as that are used for ovarian malignancy.

Postoperative chemotherapy and radiotherapy is used according to stage of the disease as per guidelines. In the present study it was an accidental finding, it was difficult to suspect her for fallopian tube cancer as patient was young with no symptoms and other investigations were also more suggestive for ovarian malignancy. PFTC should be taken into account for making the difficult diagnosis of a suspicious adnexal mass or a presumptive tubo-ovarian abscess in all young as well perimenopausal woman.

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