Primary Cancer of Fallopian Tube: A Case Report

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Abstract

Background : Primary cancer of the fallopian tube (PFTC) is a rare gynecological malignancy. The incidence of this cancer v]aries from 0.14 to 1.8% of all gynecological cancers. Patients may be asymptomatic or present with serous discharge, bleeding per vagina, and abdominal pain or mass. The lack of clinical suspicion, and delayed treatment could result in worse prognosis for the patients.

Case presentation : we are reporting a case of a A 69 years old postmenopausal women with primary fallopian tube carcinoma. The patient complain vaginal bleeding. Her pap-smear was normal, Transvaginal-Ultrasound (TV-US) finding suggested asherman syndrome. From Hysteroscopic diagnostic the result was inconclusive. Total abdominal hysterectomy, bilateral salpingoophorectomy (TAH-BSO) were performed. Histopathologic result was carcinoma endometrioid fallopian tube moderate-severe differentiated. After surgery patient do the chemotherapy with platinum based (6 cycle).

Conclusion : surgery is the treatment of choice for PFTC and followed by adequate chemotherapy cycles is an important to improve patients prognosis.

Keywords : Primary cancer of the fallopian tube, gynecology, TAH-BSO, Chemoterapy

Introduction

Primary cancer of the fallopian tube (PFTC) is a rare gynecological malignancy. The incidence of this cancer varies from 0.14 to 1.8% of all gynecological cancers. In another literature the incidence has been rising during the last decades and varied between 2.9/1,000,000 and 5.7/1,000,000. PFTC has come under focus in recent years, particularly in pathology and oncology scientific literature, given the likely role on the pathogenesis of ovarian cancer. This may have led to underestimate the true incidence of PFTC as ovarian cancer in the past, with significant clinical impact on the management of these patients.

Patients may be asymptomatic or present with serous discharge, bleeding per vagina, and abdominal pain or mass. Even clinicoradiological examination may fail to provide a pre-operative diagnosis of tubal origin lesion, as observed in the current case. The lack of clinical suspicion, and delayed treatment could result in worse prognosis for the patients. Histologic, molecular and genetic evidence shows that from 40-60% of tumours that were classified as high-grade serous carcinomas of the ovary or

peritoneum may have originated in the fimbrial and of the fallopian tube. We report a case of primary tubal endometrioid carcinoma in wowan aged 69, the current case was initially detected pre-operatively on endometrial curettageclinically dan radiologically misdiagnose as partial asherman syndrome with severe synechia.

Case Report

A 69 years old postmenopausal women presented with one episode of vaginal bleeding for last 4 months. From physical gynecology eexamination, general status was within normal limit. Patient already had twice trans vaginal ultrasound (TV-US) with different physician with ther first TV-US result uterus retroflexion with normal shape, slightly enlarge, uterine cavum was opened, size 28x18x11 mm (vol.3cc), fill with fluid that the origin is not clear, no abnormal mass inside uterine cavum, regular stratum basalis endometrium, with endometrial thickness <2mm. on the endocervix theres is an impression of a blockage (suspected endocervisitis), normal portio, both ovarium and adnexa within normal limit, patient adviced to papsmear, the second TV-US result was uterus retroflexion size 65x37x39 mm, homogeny myometrium, cervix within normal limit, no abnormal mass, there was some fluid intracavum uterine with volume ±3cc, in the endometrium there is a narrowing or thinning section with suspicion of partial synechiae (Asherman syndrome hydrometra partialis) both ovarium within normal limit, no ascites, advised to hysteroscopy diagnostic.

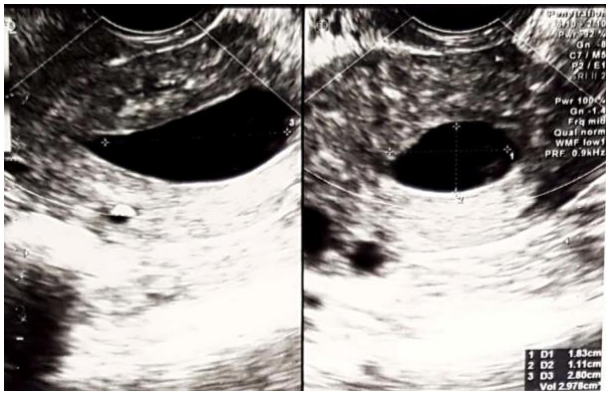

Figure 1. TV-US showed uterus retroflexion there was some fluid intracavum uterine with volume ±3cc, in the endometrium there is a narrowing or thinning section with suspicion of partial synechiae.

She performed pap-smear with result negative, did not show malignant cells and hysteroscopy diagnostic with result inconclusive, amorf material and then patient planned to perform laparotomy total abdominal hysterectomy bilateral salpingooforectomy (TAHBSO).

Uterus appears normal size and shape with left fallopian tube looks enlarge with smooth surface, right fallopian tube normal size and shape with smooth surface.

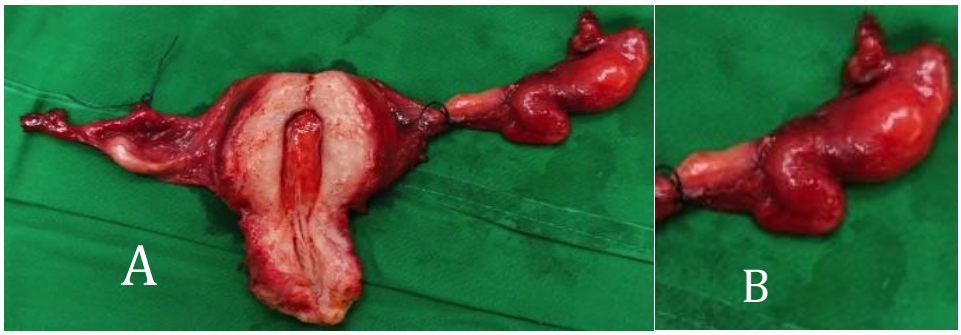

Figure 2. (A) Gross specimen showing atrophic uterus with enlarge left fallopian tube. (B) enlarge left tube specimen.

On Histopatology section, on macroscopic view showed uterus with cervix and both adnexas size 8x4x2 cm. no tumor appears. Both ovaries size 1.5 cm with tube 5 cm long. On of tubes with fragile solid part, diameter 1-1.5 cm. On Microscopic view showed uterus with cervix coated epitel endocervix. Endometrium was atrophic with at one of the tubes with mass solidly arranged, cribriform dan glandular cell nucleus was round/oval, pleomorphic, vasicular, some cell core are visible, cytoplasm eosinophilic, found mitosis. Both ovaries with small folicel cyst and corpus albicans, doesn't contain tumor mass. Histological result are compatible with carcinoma endometrioid fallopian tube moderate-severe differentiated, no tumour mass at cervix, utearus, bilateral ovaries or contralateral tube.

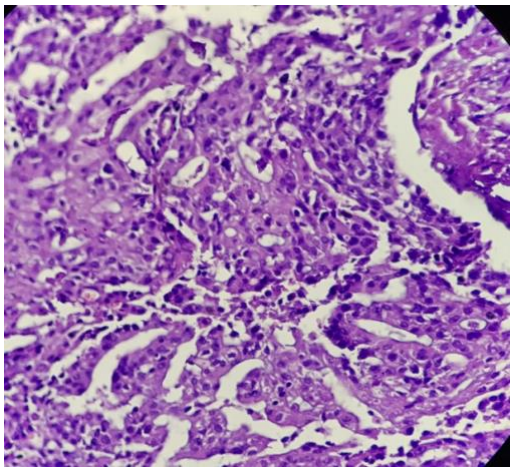

Figure 3. tumor cells showed one of the tubes with mass solidly arranged, cribriform dan glandular cell nucleus was round/oval, pleomorphic, vasicular, some cell core are visible, cytoplasm eosinophilic, found mitosis (H&E stain, 40X)

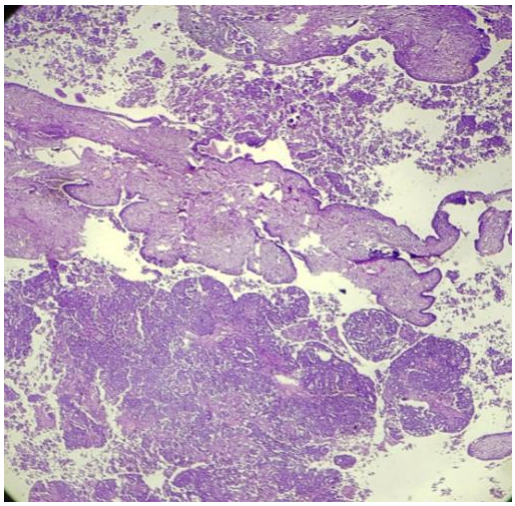

Figure 4. Tumour cells arising from tubal epithelium (H&E stain, 4X)

Discussion

PFTC is a rare gynecological malignancy and is usually recognized as a disease of postmenopausal females. Based on nine population based cancer registries, the incidence of PFTC is 3.6 per million females per annum in the USA. However, recent studies reported an increase in the incidence of PFTC. Rokitansky recorded the first microscopic description in 1861 and Orthman presented a first case report in 1888. Clinically and histologically (PFTC) resemble epithelial ovarian cancer, and it is difficult to distinguish from serious epithelial ovarian cancer or primary peritoneal serous carcinoma during or after operation.

Ovarian cancer is often diagnosed at an advanced stage, but PFTC is found more in an early stage, because of abdominal pain from tubal distension and a shorter history of symptoms in PFTC than in ovarian cancer. The aetiology of this cancer is unknown. High parity has been reported to be protective, and use of oral contraceptives and pregnancy decreases the risk of PFTC. Most patients with PFTC are postmenopausal. The peak incidence is between the ages 60 and 64 years, with the mean age of incidence being 55 years (age range 17-88 years). Patients generally present with non-specific symptoms such as abdominal pain, vaginal spotting, etc. Latzko triad of symptoms are: colicky pain relieved by discharge, intermittent serosanguinous vaginal discharge, and abdominal or pelvic mass observed in 5% of cases. Abdominal pain due to tubal dilatation may be the reason for early stage detection of PFTC compared with ovarian tumors. The pre-operative diagnosis of PFTC is rarely performed, with clinical signs and symptoms pointing towards the more frequently occurring ovarian cancer or pelvic inflammatory disease.

The diagnostic criteria for PFTC were first established by Hu et al and later slightly modified by Sidles. PFTC is diagnosed if: grossly, the main tumor is in the tube

and arises from the endo salpinx; the histological pattern reproduces the epithelium of tubal mucosa; transition from benign to malignant tubal epithelium should be demonstrated, and ovaries and endometrium are either normal or have a much smaller tumor volume than that of the tube. Our patient had all that criterias. The most common histological type of primary tubal cancer (> 90%) is adenocarcinoma with papillary features.

Tumour markers, particularly CA-125, have no role in the diagnosis of PFTC. Elevated CA-125 levels are, nevertheless, indicative of poor prognosis, and can be used during follow-up, as a marker of disease recurrence. 80% of patients with PFTC have elevated pretreatment serum levels of CA 125. In Our patient diagnostic curettage and pap-smear were negative and CA-125 was raised. CA-125 is elevated in 65% of cases. Hence, it should be used in the diagnosis and follow-up. Characteristically, tubal carcinoma appears as a fusiform swelling that may have external appearance of a hydrosalpinx or hematosalpinx, some tumors are completely solid and others are predominantly cystic.

Imaging for suspected gynecologic malignancies includes ultrasound, computed tomography (CT) scan and magnetic resonance imaging (MRI) of the abdomen. Transvaginal and transabdominal ultrasound is the simplest and usually initial imaging investigation. Although the ultrasound findings of tubal carcinoma are nonspecific and mimic other pelvic diseases such as an ovarian tumour or tube-ovarian abscess, several findings may provide a diagnostic clue preoperatively. On CT scan or MRI , the lesion can have the appearance of a small, solid, lobulated mass. On CT scan, a solid papillary intratubal mass allows for easy prediction of PFTC. MRI is considered a better method than CT or ultrasound for detecting tumour infiltration of extramural organs.

Based on National Comprehensive Cancer Network (NCCN) Clinical Practice Guidelines in Oncology version 2.2018 : Epithelial Ovarian Cancer/Fallopian Tube Cancer/ Primary Peritoneal Cancer, surgery is the treatment of choice for PFTC and is similar to that for ovarian carcinoma, cytoreductive surgery with the removal of the tumour as much as possible. The procedure of choice is Total abdominal hysterectomy (TAH)/BSO + comprehensive staging and debulking as needed (omentectomy, selective pelvic and para-aortic lymphadenectomy) for any stage of fallopian tube carcinoma. For patient was diagnosed by previous surgery or had incomplete previous surgery and/or staging are recommend firstly, established the stadium of the disease and then for resectable suspect residual disesase, completion surgical staging or tumor reductive surgery are recommended, for suspected nonresectable residual disease, chemotherapy with intravenous Platinum-based chemotherapy (6 cycles). Pectasides et al, in a series of 64 patients, obtained an overall response rate of 93% (best in all publications) for a combination of platinum-based chemotherapy with carboplatin and paclitaxel. Peters et

al reported a complete response rate of 75% in a study of 46 patients. Similarly, in a series of 45 patients treated with cisplatin, Gadducci et al, reported rates of complete and partial response of 64.4% and 17.8% respectively, with a five-year survival of 56% for complete response and only 21 months for partial response.

Conclusions

Primary cancer of the fallopian tube (PFTC) is a rare gynecological malignancy, accounting 0.14 to 1.8% of all female gynecological cancers. The clinical signs are rarely present in full. The diagnosis of PFTC is rarely considered preoperatively and is usually appreciated at the time of operation or by pathologist. The treatment approach is similar to that of ovarian cancer.

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