

Case Report

An incidental finding of primary carcinoma of the fallopian tube: a case report

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ABSTRACT

Primary fallopian tube carcinoma (PFTC) is a rare malignancy of female genital tract that histologically and clinically resemble epithelial ovarian cancer. Diagnosis of PFTC is difficult, especially at earlier stages. Most of the time it is an incidental finding. Careful surgical and pathological staging is important. It has worse prognosis than ovarian cancer as it is not routinely suspected, hence treatment is delayed.

We, hereby, report a rare case of PFTC diagnosed incidentally while doing bilateral salpingoopherectomy for removal of ovarian cyst.

Keywords: PFTC, Salpingoopherectomy

INTRODUCTION

PFTC is an uncommon tumor accounting for 0.14-1.8% of female genital malignancies.¹⁻³ More than 60% of cases occurs in post-menopausal women, with a mean age of 55 years.⁴ Bilateral diseases is uncommon and represent fewer than 25% of cases.⁵ Although fallopian tubes are derived from the same mullerian duct, malignant lesions of fallopian tubes behave like ovarian tumors both histologically and clinically. It is possible that the incidence of PFTC has been underestimated because PFTC may have been mistakenly identified as ovarian tumor during initial surgery or on microscopic examination as both tumors are identical histologically. PFTC carries 5 year survival rate of 68-76% for stage I, 27-42% for stage II and 0-6% for stage III and IV disease.⁶

CASE REPORT

We present a case of a 40 year old woman, para two with two live births (FTND) referred to our hospital with

complaints of pain in lower abdomen since one month duration. She was operated for dysfunctional uterine bleeding and her hysterectomy was done 7 years back. Tubes and ovaries were preserved. Her general condition was fair. Per speculum and per vaginal examinations were normal.

USG findings revealed a small hypoechoic cystic lesion 30x42 mm in right adnexa. CA-125 levels of this patient was not done. There was no evidence of any neoplastic lesion in urinary bladder, left colon, rectum or ovary. No ascitis was found in peritoneal cavity. Patient was subjected to surgery and bilateral salpingoopherectomy done (laporoscopically) and specimen sent for histopathological examination.

Gross and histopathological findings

We received two tubes with ovaries. One sided fallopian tube was elongated and terminal end was cystically dilated, measuring 4cm in diameter and was brownish in colour. On opening the cyst, greyish fluid was seen. Cyst

was multilocular, thin walled. Same sided ovary presented as cystic mass-4x2x2cm, thick walled containing hair, unilocular, inner wall was smooth (Figure 1).



Figure 1: Salpingoopherectomy specimen showing cystically dilated ovary and tube.

Other sided tube and ovary were unremarkable

Microscopy: Histopathological study of the tubal mass showed a complex papillary arrangement of pleomorphic, tall columnar cells with marked nuclear pleomorphism (Figure 2-4). Tumor tissue showed infiltration upto serosa. Histological features were suggestive of Primary fallopian tube carcinoma. Sections from ipsilateral ovary showed flat stratified squamous lining with hair follicles and sebaceous glands suggestive of dermoid cyst of ovary.

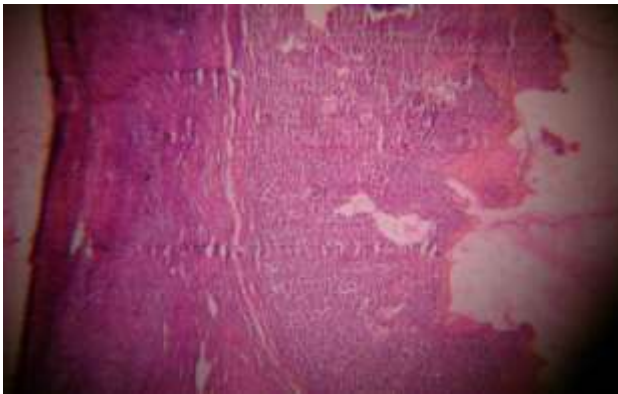


Figure 2: Adenocarcinoma in fallopian tube (H&E, 40X).

Other sided tube and ovary showed normal histology. As there was no evidence of tumor anywhere, it was diagnosed as a case of Primary Fallopian tube carcinoma with dermoid cyst of ovary.

DISCUSSION

PFTC was first described in 1847. Since then more than 2000 cases have been reported in literature. PFTC is

typically an incidental diagnosis in patients undergoing exploratory laparotomy for presumed ovarian malignancies, as was in our case.⁷ Etiology of this cancer is unknown. Hormonal, reproductive and possibly genetic factors which are thought to increase epithelial ovarian cancer might also increase PFTC risks. Others report that Pelvic inflammatory disease, sexually transmitted disease, pelvic tuberculosis, endometriosis is the triggering factors.⁸

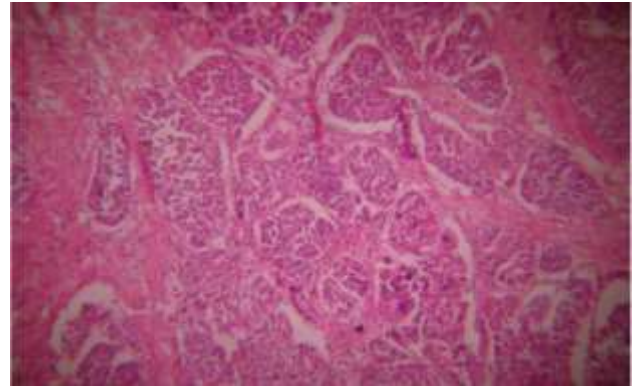


Figure 3: Complex papillary projections (H&E, 100X).

Prevalence age of PFTC is between 18-80 years, however two third of the patients have tumor after menopause with a mean age of 55-60 years.⁹ In present case the age of the patient was 40 years. Typical presenting symptoms include abdominal pelvic pain, as was in our case or pressure symptoms and vaginal bleeding.¹⁰

This bleeding is frequently associated with a watery vaginal discharge. 'Hydrops tubae Profluens' is a syndrome that is characterized by intermittent, colicky lower abdominal pain and relieved by profuse serous watery yellowish discharge from vagina caused by filling and emptying of partially blocked fallopian tube.

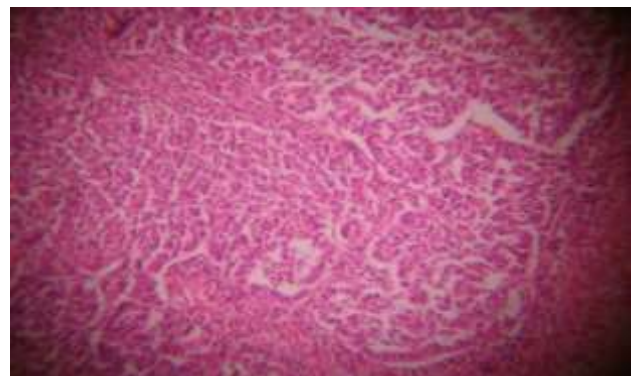


Figure 4: Pleomorphic tall columnar cells with marked nuclear pleomorphism and mitotic figures (H&E, 400X).

Correct preoperative diagnosis may be difficult even at laporotomy and on extirpated specimen by nonspecific

symptoms and physical finding. Several authors state that cervicovaginal smear is an inadequate diagnostic tool.¹⁰ Positive Pap has been reported in only 0%-23% cases.

On pelvic examination, a pelvic mass may be frequently misdiagnosed as ovarian tumor. The criteria for diagnosis of PFTC should be very rigid because the frequency of this tumor is only a tenth of that of direct tubal extension by uterine or ovarian carcinoma; microscopic features of PFTC are generally seen as in primary serous ovarian tumor.¹⁰

Majority of PFTC are papillary (serous) adenocarcinomas, however adenosquamous, endometrioid, spindle cell, oxyphilic, adenoacanthomatous, mucinous, seromucinous, transitional, hepatoid, choriocarcinomas and mixed müllerian tumors can occur.¹⁰

To make distinction between metastatic tumor and primary tubal carcinoma, histopathological diagnostic criteria of primary tubal carcinomas were set, graded by three stage differentiation.¹¹ Staging of tubal carcinoma confirms to the classification founded by FIGO in 1991.¹¹ Perforation of serosa is an ominous sign associated with poor prognosis.^{1,12}

Like ovarian carcinoma, tubal carcinoma metastasizes through mucosal surfaces to uterine cavity, pelvis, ovary and peritoneum. Recently lymph node metastasis has become important factor in 5 year survival rate.¹² Appropriate treatment is total abdominal hysterectomy, bilateral salpingo-oophorectomy and omentectomy along with drugs like carboplatin and paclitaxel. Pectasides et al reported 93% response rate with these drugs and excellent 5 year survival rate.¹³

CONCLUSION

Adenocarcinoma of fallopian tube is a rare gynecological tumor. It should be distinguished from secondaries of ovarian or endometrial cancer. To label it as a primary tumor, bulk of the tumor must be in the tube, involve the lumen and arise from the mucosa. Because these tumors are commonly undiagnosed when they are confined to the tube, they exhibit poor prognosis. Most of the time these are reported as incidental findings while operating for total hysterectomy or for other reasons.

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