Bilateral primary papillary serous carcinoma of fallopian tube- A case report

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ABSTRACT

Malignant neoplasm of the fallopian tube is the rarest of all gynaecological cancers. It comprises approximately 0.14 to 1.81% of female genital tract malignancies. In 20% cases it is bilateral. The possibility of papillary fallopian tube carcinoma is rarely considered pre-operatively and is usually first appreciated by the pathologists. We present a case of bilateral papillary serous fallopian tube carcinoma in a 50 years old postmenopausal female.

Key words: post-menopausal female, bilateral papillary adenocarcinoma, fallopian tube

INTRODUCTION

Primary carcinoma of the fallopian tube is reputedly one of the rarest female genital cancers. According to Ricci (93), it was first described by Renaud in 1847, and later by Rokitanski in 1861. In spite of these earlier descriptions, the first genuine case report on Primary carcinoma of fallopian tube is attributed to Orthman (85) who described the disease in 1888. It constitutes 1% of gynecologic malignancies. Early clinical manifestation and prompt investigations lead to diagnosis in the early stage of disease accounting for a better survival compared with ovarian cancer. However, the diagnosis of PFTC is rarely considered preoperatively and is usually first appreciated by the pathologist. Principles of management generally follow that of epithelial ovarian cancer. We present a case of bilateral papillary serous fallopian tube carcinoma in a 50 years old postmenopausal female.

CASE REPORT

A 50-year-old postmenopausal, para 3, with 3 living children, tubectomized female presented with vaginal spotting since one year. Speculum examination showed minimal bleeding with a healthy cervix and vagina. Vaginal examination revealed a normal sized, anteverted uterus with clear fornices. Patient was diagnosed clinically to have dysfunctional uterine bleeding and posted for total abdominal hysterectomy. During operation, the uterus was found to be atrophied; with normal ovaries. Both the fallopian tubes were swollen and inflamed. Based on the gross appearance, a provisional diagnosis of tuberculous salpingitis was made, and therefore, further investigated.

Gross pathological findings:

The uterus was slightly atrophic, measuring 7cm x 3cm x 1.5cm and weighed 25gms. The fallopian tubes measured 10cms in length. Bilateral symmetrical dilatation towards the fimbrial end was evident. The dilated part of the left tube measured 1.5cm x 0.5cm x 0.5 cm while on the right tube measurement was 1.5cm x 1cm x 1cm. Both the ovaries were mildly atrophic; no tubercles or growth was seen on the external surface. Sectioning the right tube showed a grayish-white, papillary and polypoid friable growth on the postero-superior portion of the dilated segment; rest of the mucosa was unremarkable. Similar findings were also observed on left side on antero-superior portion. The gross findings were suggestive of bilateral primary papillary carcinoma of the fallopian tubes near the fimbrial end. (Fig.1)

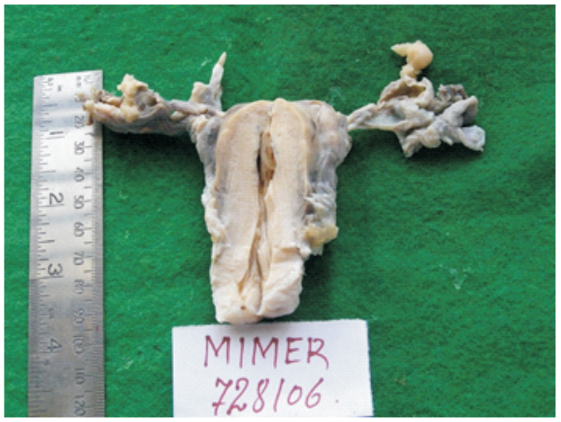

Fig.1: Dissected fallopian showing presence of grayish-white, papillary and friable tumor mass

Histological Findings:

Sections from the tumor of the fallopian tubes revealed papillary serous adenocarcinoma. (Fig. 2 & 3) Transition from the normal to malignant epithelium was seen in both the tubes. (Fig.4) The cervix, the uterus and ovaries were normal. Considering gross and histological findings, the diagnosis of bilateral primary papillary fallopian tube carcinoma was confirmed.

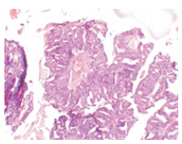
Fig.2

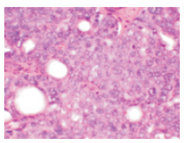
Fig.3

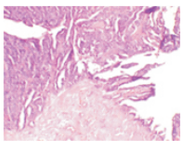
Fig.4

Fig. 2.Tumor cells arranged in papillary pattern with fibrovascular cores (H&E 4X). Fig.3. Tumor cells arranged in solid pattern and showing vesicular nuclei with prominent nucleoli and eosinophilic cytoplasm (H&E 40X). Fig. 4. Transition from normal to malignant epithelium (H&E 10X)

DISCUSSION

The first gross description of fallopian tube cancer was attributed to Reynaud in 1847. Rokitansky recorded the first microscopic description in 1861 and Orthmann is generally credited with the first case report in 1888.[1] More than 1500 cases of PFTC have been reported in literature up till now- out of which eight were from India.[2-7] Bilateral involvement occurs in 20% of cases.[3-4] Our case also showed bilateral involvement by the tumor. PFTC most frequently occurs between the 4th and 6th decades of life, with a mean age of occurrence of 55 years.[2]

Pelvic mass is the most common physical finding occurring in approximately 65% of these patients.[1] Latzko's triad of symptoms consisting of intermittent, profuse, sero-sanguinious vaginal discharge; colicky pain relieved by discharge; and abdominal or pelvic mass has been reported in 15% of cases. Hydrops tubae profluens, the pathognomic feature in such cases occurs only in 5% of the patients.[3] Vaginal bleeding can be a clinical manifestation and PFTC must be considered in the differential diagnosis when post-menopausal bleeding persists after a negative curettage.[1]

Usually the lesion is misdiagnosed as ovarian tumor, tubo-ovarian mass or an ectopic pregnancy. If the tubes are enlarged, it is usually misinterpreted as hydrosalpinx or pyosalphinx.[2] Positive PAP smears have been reported in only 0-23% of cases. The discrepancy between an abnormal PAP smear, and negative findings on colposcopy, cervical biopsy and endometrial curettage should be considered suspicious for PFTC.[2] The CA-125 is also a useful marker for the diagnosis.

The diagnostic criteria for PFTC was first established by Hu and colleagues and later slightly modified by Sidles. Accordingly, PFTC is diagnosed if: grossly, the main tumor is in the tube and arises from the endosalpinx; histologically, the pattern reproduces the epithelium of the fallopian mucosa (papillary pattern); transition from benign to malignant tubal epithelium should be demonstrated; and ovaries and endometrium are normal or have a much smaller tumor volume than that of the tube.[1] All the above criteria were fulfilled by the tumor detected in our case, and hence the diagnosis of PFTC was made.

The tumor metastasizes by direct invasion;

transmural, lymphatic or haematogenous spread.[2] There is no uniform staging system because of its rarity. Hence staging is done as in ovarian cancers. The five-year survival reported was 80% for stage 1 and 22% for all other FIGO stages.[2] Surgery is the mainstay of treatment for PFTC. Chemotherapy seems to have a strong rationale as adjuvant treatment for patients with early stage disease.[3]

CONCLUSION

PFTC is a rare tumor that histologically and clinically resembles epithelial ovarian carcinoma. Both carcinomas have a similar age distribution, are more common among nulliparous women and are often of the serous papillary histology. However, PFTC differs from epithelial ovarian carcinoma in that it is more often diagnosed at an earlier stage because of the abdominal pain resulting from tubal dilatation and also abnormal bloody watery, discharge. Therefore, a high index of suspicion of PFTC in a post menopausal female with the above clinical features should be kept in mind. Diagnosing the case at an earlier stage provides better prognosis and a longer survival.

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