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# Post-menopausal discharge-common presentation, uncommon cause- primary fallopian tube cancer (PFTC)

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**Conflicts of Interest:** Nil

## Introduction

Fallopian tube cancer is rare & accounts only for 0.3% to 1 % of gynecologic malignancies [1]. Renaud first described fallopian tube malignancy in1847.In1888Orthmann presented the first genuine case report. Since then, approximately 3000 cases have been reported as PFTC.FIGO published a staging system for PFTC in 1991. The etiology of this tumor is suggested to be associated with chronic tubal inflammation, infertility, tuberculous salpingitis and tubal endometritis. Likeovarian malignancy, a BRCA germline mutation & TP53 mutation are associated with fallopian tube malignancy. Clinical sign & symptoms - vaginal bleeding is the most commonly reported symptom of Fallopian tube cancer and present in approx. 50% of patients. Other symptoms are nonspecific they include lower abdominal pain, pelvic pain serosanguinous vaginal discharge & pelvic mass. Here we are reporting a rare case of primary fallopian tube carcinoma supported with intraoperative findings & histopathological examinations.

## Case report

A 63-year-old female postmenopausal for 16 years presented with complains of blood mixed vaginal discharge off and on, since last 6 months. Past menstrual history was normal. Patient had 3 full term vaginal deliveries. She had history of surgery for bilateral breast fibroadenoma- 20 years back and history of vaginalcyst excision 10 years back. She had family historyof carcinoma endometrium in her mother and carcinoma breast in sister.

On examination her general condition was good, abdomen was soft, non-tense, non-tender, no organomegaly. On per speculum examination, thin

yellowish discharge was present that was not blood tinged, small pinpoint polyp was present at external cervical Os. On per vaginal examination -cervix was firm, central, uterus bulky, retroverted, tender and mobile.Bilateral fornices free.USG pelvis showed uterus normal size, Endometrium thick heterogenous and cystic, measuring 24 mm, myometrium is normal. Cervix is normal. B/L ovaries normal.

Pap smear was negative for intraepithelial malignant lesion. Swab culture and sensitivity of vaginal showed polymicrobial flora.BRCA1 & BRCA2 testing was done in patient and her siblings & report comes as negative.

Her endometrial biopsy was taken in view of post Menopausal bleeding which showed multiple tissue bits of tumor cells arranged in papillary architecture. Cells are round to oval with hyperchromatic nucleus and scanty cytoplasm. stromal invasion seen. Features s/o serous papillary carcinoma.

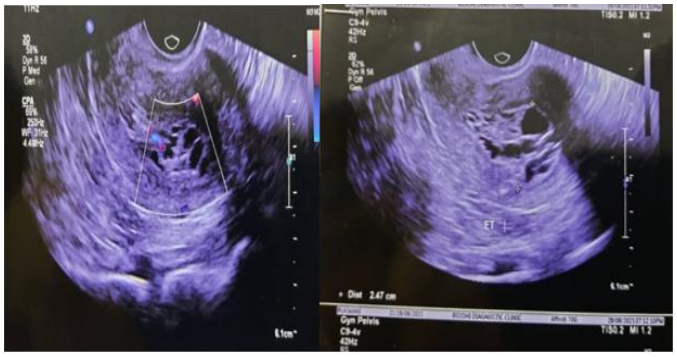

Fig. 1: Thick, Heterogenous and Cystic endometrium, ET-24 mm

MRI pelvis was done that showed polypoidal mass lesion in endometrial cavity arising from left Anterolateral wall in lower uterine segment. Lesion measuring approx. 19x27x32 mm with multiple small cysts within it. Evidence of moderate hematometra with fluid filled level in endometrial cavity, distended endometrial cavity measures approx. 34mm inthickness. No definite infiltration of myometrium was noted by the endometrial lesion.

Uterus anteverted and measuring about 83x47x60 mm.MRI upper abdomen -normal.

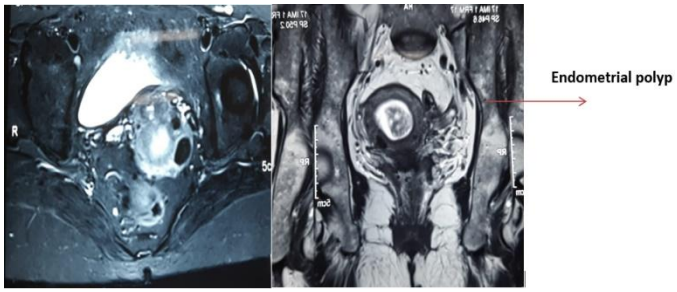


Fig. 2: Air fluid level in endometrial cavity & endometrial polyp

Her CA-125 level was done that was found to be 10.1 u/ml.

On the basis of endometrial biopsy and MRI report considering the diagnosis of serous papillary carcinoma of endometrium stage I-surgery was planned-Total abdominal hysteric to my with bilateralsalpingo-ophorectomy with bilateral pelviclymphadenectomy with infracolicomentectomy in view of serous variety of cancer endometrium.

On gross examination uterus was normal size.A polyp approx. 3.5x3x1.5 cm seen occupying the uterine cavity. Uterine endometrium measuring 1.2 cm at thickest.Right fallopian tube measuring 4.5 cm.left fallopian tube measuring 5 cm.On cut section Right and left fallopian tube both showed intraluminal papillary projections.

Fig. 3:Uterine cavity showing Endometrial polyp

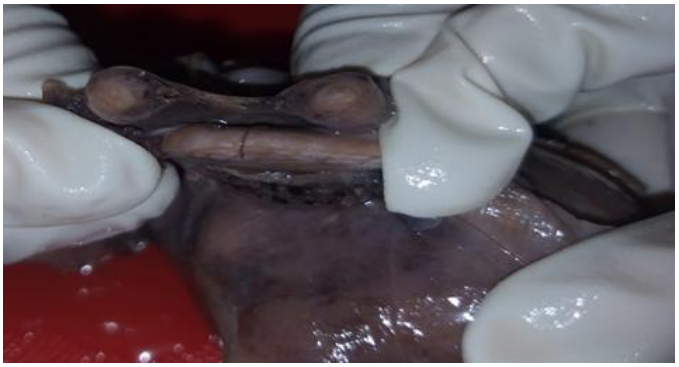

Fig. 4:Cut section of Left Fallopian Tube showing papillary Growth

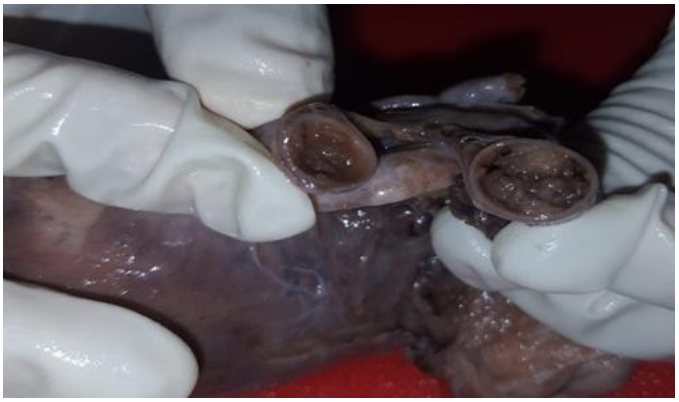

Fig. 5: Cut section of Right Fallopian Tube showing intraluminal papillary Growth

Final histopathology report showed high grade papillary serous carcinoma involving right fallopian tube, adjoining epithelium also shows marked dysplastic changes in the fallopian tube, overlying serosa is unremarkable. Left fallopian tube shows presence of intraepithelial serous carcinoma, no invasion in the underlying stroma. Section from endometrium polyp shows presence of endometrial glandular hyperplasia along with focal areas showing features of serous intraepithelial carcinoma with no involvement of underlying myometrium invasion. Bilateral ovaries were negative for malignancies. Cervix showed chronic cervicitis. Myometrium showed presence of small leiomyomas. Parametrium was unremarkable. Hence possibility of primary fallopian tube serous carcinoma involving right fallopian tube, endometrial polyp and left fallopian tube having intraepithelial serous carcinoma was considered. Omentum and pelvic nodes were negative for the disease.Peritoneal washings were negative for malignant cells. There was no lymph vascular and perineural invasion. Post op period was uneventful.

On basis of histopathological findings, she was started on chemotherapy consisting of carboplatin and paclitaxel. Patient has tolerated the chemotherapy well and is under constant follow up.

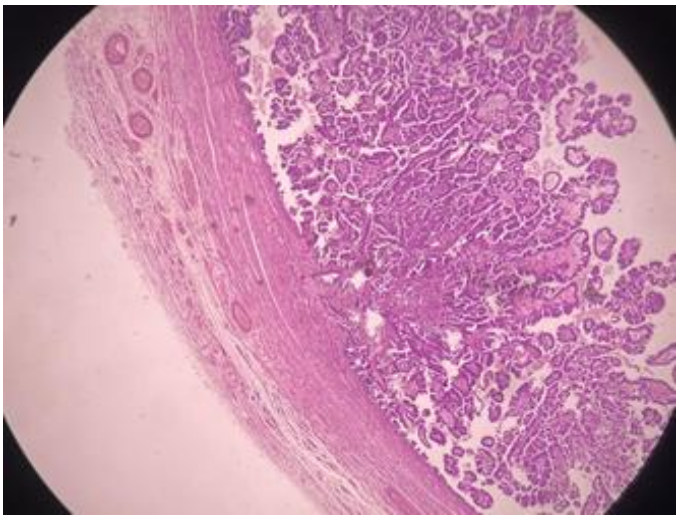

Fig. 6:40X H/E showing invasive papillary serous carcinoma in right fallopian tube.

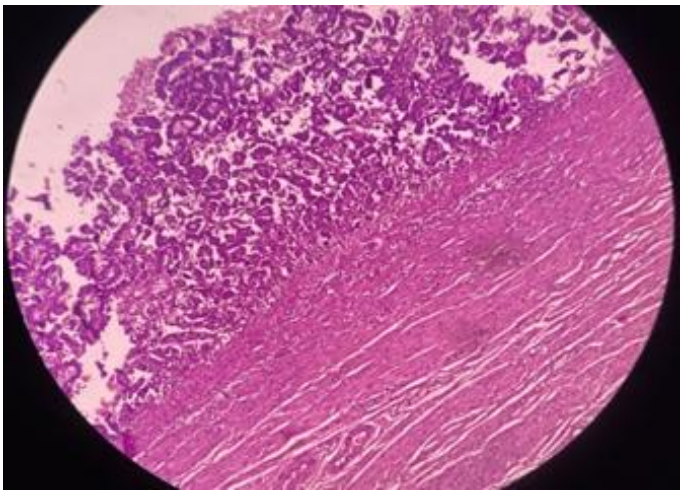

Fig. 7: Tumor Cells showing Pleomorphism and mitotic activity with Eosinophilic cytoplasm with vesicular

chromatin and prominent nucleoli in right fallopoian tube

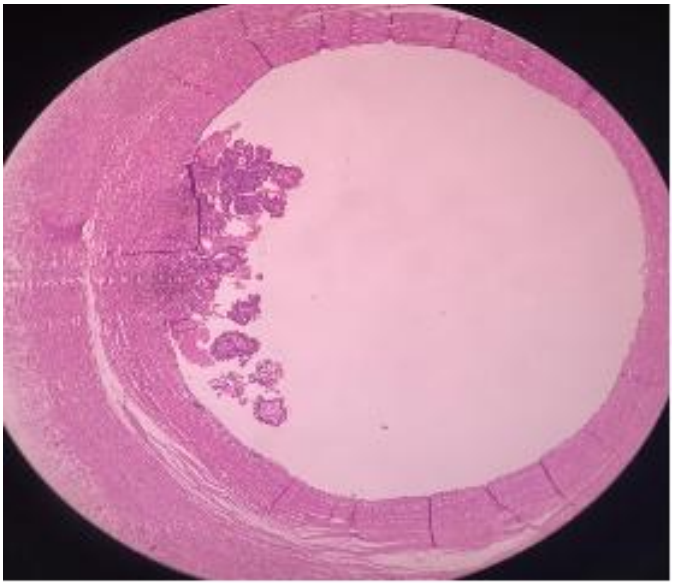

Fig. 8: 40X H/E showing Intraepithelial serouscarcinoma in left fallopian tube.

**Discussion**

Primary Fallopian tube carcinoma is the rarest malignancy of the female genital tract. 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.

Clinically and histologically primary fallopian tube cancer resembles epithelial ovarian cancer, and it is difficult to distinguish from serous epithelial ovarian cancer or primary peritoneal serous carcinoma during or after operation [2]. Epithelial ovarian cancer is often diagnosed at an advanced stage, but primary fallopian tube cancer is found more in an early stage, because of abdominal pain from tubal distension and a shorter history of symptoms in primary fallopian tube cancer than in epithelial ovarian cancer [3].

The etiology of this cancer is unknown. High parity has been reported to be protective & use of oral contraceptive & pregnancy decrease the risk of PFTC [4]. The clinical symptoms and signs of PFTC are not specific.

Most common presenting symptoms are abdominal pain, which may be colicky as a result of forced tubal peristalsis or dull aching as a result of tubal distension and vaginal bleeding or watery discharge [5]. Latzko's triad that consists of intermittent profuse serosanguinous vaginal bleeding, colicky pain relieved by discharge and an abdominal or pelvic mass. This triad is reported in only 15% of PFTC cases [6]. Non-specific symptoms often lead to misdiagnosis ofFTC as endometrial cancer based on similar presentation and its higher epidemiological incidence. In our case also clinical presentation, imaging and endometrial biopsy first led us to the diagnosis of cancer endometrium. Most of the reported primary FTC cases were diagnosed intraoperatively or based on histopathological findings. The rate of preoperative diagnosis is in range of 0-10% [7] & up to 50% are missed intraoperatively. [8]

Diagnostic criteria for PFTC were 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 Endo salpinx; the histological pattern reproduces the epithelium of tubal mucosa; transition from benign to malignant tubal epithelium should be demonstrated along with those ovaries and endometrium should be either normal or have a much smaller tumor volume than that of tube [7,10].

The points favoring the fallopian tube origin in our case were:

(1) Marked dysplastic changes in the adjacent fallopian tube mucosa abutting the invasive carcinoma.

(2) Presence of invasive component in the fallopian tube.

(3) Tubal histological pattern.

(4) Presence of independent endometrial intraepithelial serous carcinoma is there.

In the study by Shakuntala et al Cancer antigen 125 (CA-125) was measured in 8 women and was found to be below 65 U/mL in 4 women in early-stage disease (range 8.38–60 U/mL) and >65 in advanced stage (range 400–988 U/mL). An elevated CA-125 is correlated with advanced Stage III and IV [11].

Surgery is the treatment of choice for PFTCthat is similar to that for ovarian carcinoma cytoreductive surgery with the removal of the tumor as much as possible. The procedure of choice is total abdominal hysteric tomy, bilateral salpingo-oophorectomy, omentectomy, selective pelvic & para-aortic lymphadenectomy for any stage of fallopian tube carcinoma [12,13]. Postoperativeplatinum-based combination adjuvant chemotherapy is the most commonly used therapy for these patients. The stage of disease at the time of diagnosis is most important factor affecting the prognosis. The other prognostic factor includes the residual volume of the tumor after cytoreduction, the presence of ascites & the histologic grade of the tumor [7,10].

In conclusion PFTC should also be considered in differential diagnosis of peri and post-menopausal women who present with unexplained bleeding per vagina, pelvic pain, adnexal mass.

**References**

1. A. Riska and A. Leminen, “Updating on primary fallopian tube carcinOma,” ActaObstetricia et Gynecologic aScandinavica, vol. 86, no. 12, pp. 1419–1426, 2007.View at: Publisher Site | Google Scholar

2. TahiriElousrouti L, Erragad FZ, Jayi S, et al. Primary Adenocarcinoma of the Fallopian Tube: Report of Two Cases. Journal of Clinical Case Reports. 2016; 6:5.

3. Moore KN, Moxley KM, Fader AN, et al. Serous fallopian tube carcinoma: a retrospective, multi-institutional case-control comparison to serous adenocarcinoma of the ovary. GynecolOncol. 2007; 107:398–403. https://doi.org/10.1016/j.ygyno.2007.09.027 PMid:17997146

4. Riska A, Leminen A. Determinants of incidence of primary fallopian tube carcinoma (PFTC). Methods Mol Biol. 2009; 472:387- 96. https://doi.org/10.1007/978-1-60327-492-0_18 PMid:19107444

5. Horng HC, Teng SW, Huang BS, et al. Primary fallopian tube cancer: domestic data and up-to-date review. Obstet Gynecol. 2014;53(3):287-92. https://doi.org/10.1016/j.tjog.2014.07.003

6. Lau H-Y. Primary fallopian tube carcinoma: a clinicopathologic analysis and literature review. J Chin Med Assoc. 2013;76(10):583- 7. https://doi.org/10.1016/j.jcma.2013.06.010 PMid:23890835

7. Sedlis A. Carcinoma of the fallopian tube. SurgClin North Am. 1978; 58: 121–129. https://doi.org/10.1016/S0039-6109(16)41439- 8

8. Hu, CY, Taymor, ML, and Hertig, AT. Primary carcinoma of the fallopian tube. Am J Obstet Gynecol. 1950; 50: 58–67. https://doi.org/10.1016/0002-9378(50)90341-3

9. Huber-Buchholz MM, Buchholz NP, Staehelin JJ. Analysis of 23 cases of primary carcinoma of the fallopian tube over 50 years. ObstetGynaecol Res. 1996;22(3):193-9. https://doi.org/10.1111/j.1447-0756.1996. Tb00966.x

10. Cheng Horng H, Teng S.W, Huang B. Primary fallopian tube cancer: Domestic data and up-to-date review, Taiwanese Journal of Obstetrics and Gynecology. 2014; 53(3):287–292. https://doi.org/10.1016/j. tjog.2014.07.003 PMid:25286779

11. E. Terzakis, G. Androutsopoulos, C. Grigoriadis, D. Zygouris, G. Derdelis, N. Arnogiannaki, et al., Synchronous primary endometrial and fallopian tube cancers, Eur. J. Gynaecol. Oncol. 31 (4) (2010) 467–468.

12. Berek S.J, Crum Ch, Friedlander M, Cancer of the ovary, fallopian tube, and peritoneum International Journal of Gynecology& Obstetrics. 2015; 131(2): S111–S122.

13. Gomes FV, Dias JL, Lucas R, Cunha TM. Primary fallopian tube carcinoma: review of MR imaging findings. Insights Imaging. 2015; 6:431–439. https://doi.org/10.1007/s13244 – 015 – 0416-y PMid:26150249 PMCid: PMC4519813

14. Hari prasad PSH, Srinivas T, Shetty KJJ. Primary bilateral fallopian tube carcinoma the report of a single case with review of the literature. ClinDiagn Res. 2013;7(5):930-2.

15. Berek S.J, Crum Ch, Friedlander M, Cancer of the ovary, fallopian tube, and peritoneum International Journal of Gynecology& Obstetrics. 2015; 131(2): S111–S122.