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**Case Report** 

# Benign papillary cystadenofibroma of fallopian tube presenting as posterior fornix cyst: case report

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#### **ABSTRACT**

Benign papillary cystadenofibroma of fallopian tube is very rare tumor of female genital tract. Usually asymptomatic and incidental finding. Worldwide literature only 18 cases were found. On account of its rarity and best of our knowledge, is the first case of benign papillary cystadenofiboma presented as posterior fornix cyst, so we are presenting this case. We report a rare case of benign papillary cystadenofibroma of fallopian tube in a 30-years old female P3L3 presenting with abdominal pain. On examination abdomen was soft, per vaginally mobile non-tender cystic mass of 5×4 cm was noted. Laparotomy was planned. Intraoperatively 5x4 cm cyst arising from serosal surface of left fallopian tube near fimbrial end noted with bilateral ovaries normal. Left fimbrial cystectomy with salpingectomy was done with sparing both ovaries. Histopathology suggestive of benign papillary cystadenofibroma of fallopian tube. Patient had uneventful recovery in follow up period. Benign papillary cystadenofibroma of fallopian tube is rare tumor found incidentally. Tumor seems to have benign course only cystectomy is required for treatment.

Keywords: Fallopian tube, Benign papillary serous cystadenofibroma, Posterior fornix cyst, Benign, tumor

## **INTRODUCTION**

Fallopian tubes tumors are rare in general and are the rarest tumors of female genital tract. Usually asymptomatic and incidental finding. Worldwide literature only 18 cases has been found. World Health Organization (WHO) classified tumors as- papillomas, cystadenoma, adenofibroma, cystadenofibroma (CAF), metaplastic papillary tumors and endometrioid polyps belong to group of benign tumors. Serous papillary cystadenofibroma (SPCAF) is ususally located on fimbrial end of the tube and it is considered that it has "Müllerian" origin. Preoperative diagnosis is rare. It may appear macroscopically and ultrasonographically malignant. However, malignant potential is very rare. Usually occurs in younger women hence decision for radical surgery should be reconsidered.

## **CASE REPORT**

30 years old P3L3, tubectomised patient was came to outpatient department (OPD) with case of pain in abdomen since 1 month, localised on left lower side of abdomen, dull aching, on and off, relieved by its own and not associated with nausea, vomiting, flatulence. No history of dyspareunia. Menstrual history is neat regular, no complaints. Obstetric history P3L3 with first birth by caesarean section and rest all vaginal deliveries. Last childbirth was male child 3 year. Sterilization done 3 years back. No bladder/bowel complaints. Past medical or surgical history was insignificant.

On clinical examination vitals were sable. Abdomen was soft, nontender and no mass was palpable. Transverse scar

of caesarean section was seen. On per speculum examination fullness was seen in upper 1/3rd of posterior vaginal wall with absent cough impulse.

There was no bleeding or discharge. Per vaginal examination cervix was pointing downwards and uterus was ante verted, normal size. In posterior fornix 5×4 cm cystic mass with smooth surface, mobile and nontender was felt. Other fornices were free and nontender. Per rectal examination same cystic mass was felt.

Differential diagnosis for posterior vaginal wall cyst was made as inclusion cyst, mullerian cyst, endometriosis, gartners duct cyst- rare posteriorly, ovarian cyst, enterocele. Patient was admitted and investigated. Routine blood investigations were within normal limits.

On ultrasonography  $5\times4$  cm cyst was seen in vagina with polypoidal mass of  $1.7\times1.5$  cm arising from cyst wall suggestive of complex vaginal cyst.



Figure 1: TVS USG suggestive of complex vaginal cyst.



Figure 2: CT (A+P) PLAIN.



Figure 3: CT (A+P) Contrast posterior vaginal cyst of 6x5 cm.



Figure 4: Gross examination of specimen.

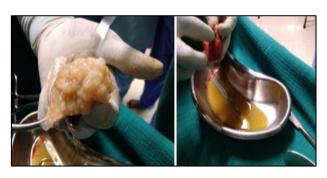


Figure 5: Cut section of specimen.

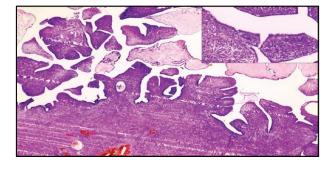


Figure 6: HPR of benign paillary cystadenofibroma of fallopian tube.

Table 1: Reported cases of cystadenofibroma of fallopian tube.

Authors	Year of publication		Age Clinical findi	ings treatment	Site and size	Microscopy
Kanbour et al <sup>3</sup>	1973	63	Incidental finding during surgery for Vaginal hysterectomy prolapse		Intramural part of left uterine cornua, 2 cm	Cystic papillary adenofibroma
Silverman et al <sup>4</sup>	1978	36	Incidental finding during tubal ligation Bilateral partial following termination of pregnancy salphingectomy		Cystic mass at fimbrial end of left tube, 3.5 cm	Serous cystadenofibroma
de la Fuente <sup>5</sup>	1982	73	Incidental finding during surgery for TAH with BLSO uterine leiomyomas		Fimbrial end of right fallopian tube, 2.5×2×2 cm	Mixed mullerian tumor- adenofibroma
Casasola and Mindan <sup>6</sup>	1989	32	Incidental finding during operation for multiple uterine leiomyomas	Hysterosalpingo- opherectomy	NA	Cystadenofibroma
Chen <sup>7</sup>	1994	24	Primary infertility	BL tubal cystectomy with wedge biopsy of the ovary	Fimbrial end of right and left fallopian tube, 2.5×2 cm and 0.3×0.2 cm respectively	Bilateral papillary adenofibroma
Sills et al <sup>8</sup>	2003	NA	Incidental finding during IVF embryo transfer	Laparoscopic tubal cystectomy	Distal end of right fallopian tube, 5.5 cm	Serous cystadenofibroma
Gürbüz and Ozkara <sup>9</sup>	2003	48	Irregular vaginal bleeding with uterine leiomyomas	TAH with BLSO	Serousal surface of right fallopian tube, 0.4 cm	Serous cystadenofibroma
de Silva et al <sup>10</sup>	2010	19	Pain in right iliac fossa	Right SO	8 cm	Cystadenofibroma
Mondal <sup>11</sup>	2010	27	Ectopic pregnancy	Left salpingectomy	Fimbrial end of left fallopian tube, 2×1.5 cm	Adenofibroma with ectopic pregnancy
Erra and Costamagna <sup>1</sup>	2012	50	Incidental finding during operation for leiomyomas	TAH with BLSO	Fimbrial cyst, 3 cm	Serous cystadenofibroma
Pandey et al <sup>13</sup>	2012	20	Incidental finding during emergency LSCS with BLTL LSCS with BLTL		Cystic mass in the fimbrial end of left tube, 4×3 cm	Serous cystadenofibroma
Fukushima et al <sup>14</sup>	2014	32	Incidental finding during operation for Linear salphingoostomy Solid cystic mass near ampule a suspected case of ectopic pregnancy and evisceration of left fallopian tube, 20 mm			Papillary cystadenofibroma
Yasmeen k et al <sup>1</sup>	2015	30	Incidental finding during operation for Left tubal cystectomy Solid cystic mass on the a suspected case of ovarian neoplasm serosal aspect of left fallopian tube, 12×10 cm			Serous papillary cystadenofibroma

Computed tomography (CT) scan (A+P) plain-posterior vaginal cyst of 6×5 cm and on CT (A+P) contrast scan cyst near posterior fornix with no enhancement after contrast of size 5.5×4 cm s/o posterior vaginal cyst was seen. Decision of cyst removal was taken. In operation theatre under anaesthesia per vaginal and per rectal examination was done. 5×6 cm mass was felt in posterior fornix but arising from left pelvis. Laparotomy was planned and Pfannesteil incision was taken. Intra operative uterus, right ovary, left ovary, right fallopian tube was normal. Same cystic mass

of  $5\times6\times7$  cm was seen arising from serosal surface of left fallopian tube near fimbrial end. Left fimbrial cystectomy with salpingectomy was done.

Examination of specimen – gross examination - smooth wall cyst and on cut section- smooth cyst wall with papillary excrescences was seen. Specimen was sent for histopathological examination. Postoperative CA125-26 U/ml.

HPR- Benign papillary cystadenofibroma of fallopian tube. Cyst wall was composed of fibrous and muscular walls of tube. Papillary folds enclosing solid fibrous stroma lined by single layer of tall columnar epithelium.

Postoperative period was uneventful. Suture removal was done on 7th postoperative day. Wound was healthy. She has since been followed up in the out-patients clinic over a 12 months period and was found to do well with no evidence of recurrence of disease.

#### DISCUSSION

Adenofibromas are relatively rare benign tumors arising from the germinal lining and ovarian stroma with rare malignant potential. Of all the reported adenofibromas majority are of serous type. However, endometrioid, mucinous and clear cell types also exist. Table 1 shows a systematic review of the cases of cystadenofibromas arising from the fallopian tube.<sup>2</sup>

It presents as solitary round mass arising from intraluminal or serosal surface of fimbrial end. Usual age of presentation is 4th to 5th decades. Our case was 30 years a rare presentation. Tumor presents with symptoms of abdominal pain, palapable mass, vaginal bleeding, urinary or bowel complaints. Differential diagnosis of tumors of tubal origin includes tubal carcinoma (primary/metastatic, serous tumor of low malignant potential (STLMP), borderline papillary serous tumor.

Histologically similar to ovarian tumor but differs in topogrphic localisation.

Finding of Mullerian type epithelium, immunephenotypic profiles of vimentin, cytokeratin co expression and diffuse apical epithelial membrane antigen immunoreactivity suggestive of tumor origin from embryonic remnant from Mullerian duct.

## CONCLUSION

Benign serous papillary cystadenofibroma of fallopian tube tumor is rare and dignosed incidentally. It should be differentiated from other fallopian tube tumors as prognosis and management differs. It is having rare malignant potential. It usually presents in young women with impact on fertility. So cystectomy is the only treatment required. So, decision for radical surgery should be reconsidered. This case is presented on account of its rarity and we believe this is the first reported case of benign serous papillary cystadenofibroma of the fallopian tube to present as posterior fornix cyst.

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