

# A Rare Case Report of Primary Serous Cystadenofibroma of Fallopian Tube

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**Abstract:** Serous cystadenofibromas of the fallopian tube are very rare benign tumors of the female genital tract. They are usually asymptomatic and are found incidentally. Until now, only 18 cases of this tumor have been reported in the literature. 47 year-old Nulligravida presented with abnormal vaginal bleeding for the past 4 months and dysmenorrhea for 1 year. She also complained of lower abdominal pain which was dull in nature and intermittently radiated to back. There was no significant family history. Her medical history was uneventful. On physical examination, abdomen is soft, non tender. On Per speculum examination cervix deviated to left, anterior vaginal wall 3×3cms submucosal fibroid present. On per vaginal examination uterus normal size, deviated to left, right and posterior forniceal fullness present, and firm mass in anterior vaginal wall. Transabdominal sonography showed cystic lesion in right ovary of 6.5×5cms with internal echoes (right serous cystadenoma) and cervical fibroid of 2.8 ×2 cms and non visualized right kidney. All relevant investigations done and in normal limits. The patient after an informed consent underwent total abdominal hysterectomy with bilateral salpingo-oophorectomy, during surgery the tumor was found to arise from the fallopian tube. Histopathology reported as serous cystadenofibroma of right fallopian tube. We present this unique case on account of its rarity, unusual presentation, with a short review of literature. Serous cystadenofibromas of the fallopian tube are very rare benign tumors of the female genital tract. They are usually asymptomatic and are found incidentally. Until now, only 18 cases of this tumor have been reported in the literature.

**Keywords:** SPCAF, cystadenofibroma, fallopian tube tumour, benign

## 1. Introduction

Tumors of the fallopian tube are uncommon and are the rarest tumors of the female genital tract. According to the World Health Organization (WHO) classification, benign tumors of the fallopian tube comprise papilloma, cystadenoma, adenofibroma, cystadenofibroma (CAF), metaplastic papillary tumor and endometrioid polyp. Serous papillary CAF (SPCAF) is a rare tumor of the fallopian tube which is usually found at the fimbrial end of the tube and is considered to be of müllerian origin. Most women with these tumors are asymptomatic, and majority are incidental findings during work up or surgery for other gynecological disorders. Preoperative diagnosis is usually missed. Even though they are rare, they have to be differentiated from other tumors of the fallopian tube like borderline and malignant tumors as management and prognosis is different. [1]

## 2. Case Report

A 47 year-old Nulligravida presented with abnormal uterine bleeding for the past 4 months and dysmenorrhea for 1 year. She also complained of lower abdominal pain which was dull in nature and intermittently radiated to back. There was no significant family history. No history of infertility treatment. Her previous gynaecological and medical history was uneventful. On Abdominal examination-soft, nontender,

on speculum examination-cervix deviated to left, anterior vaginal wall fibroid of 3×3cms noted and on bimanual examination uterus normal in size and deviated to left with anterior and posterior forniceal fullness present, firm mass in anterior vaginal wall. Transabdominal sonography reported as cystic lesion in right ovary of 6.5×5cms with internal echoes (right ovarian serous cystadenoma) and cervical fibroid of 2.8 ×2 cms and non visualized right kidney. All relevant investigations done and in normal limits. Tumour markers-CA 125: 14.50 U/ml (reference value <35). Patient after an informed consent taken up for exploratory laparotomy. Intraoperatively, Cyst was found to arise from right fallopian tube of 6×5cms with multiple torsion of the tube seen, omentum adherent to the cyst. Hysterectomy with bilateral salpingo-oophorectomy done. Right side ureter traced with blind end, with absent right kidney. Grossly, right tube cyst of 6.5\*5\*4.5cms, filled with greenish yellow serous fluid seen. Specimen sent for histopathological examination. On cut section cyst wall is thin, smooth and congested, focal granular papillary excrescences seen. Microscopy showed a cyst with many branching papillary projections of varying sizes lined by cuboidal lining with focal stratification. The core of the papillae and cyst wall showed abundant, fibrous stroma of dense connective tissue. No atypia or invasion was seen. Based on histopathological findings a diagnosis of serous primary cystadenofibroma of fallopian tube was given.

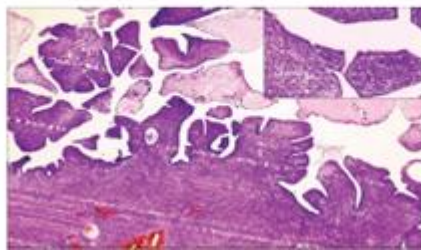
Picture showing right fallopian tube cyst



Cyst arising from right fallopian tube 6x5cms , multiple torsion of tube seen.



Picture showing branching papillary projections of varying sizes with cuboidal lining with focal stratification.



### 3. Discussion

The age of presentation showed a wide range from 19 to 73 years. Mean age reported is 49 years. Clinical presentation was variable. The diagnosis of cystadenofibroma is a difficult one, as they macroscopically and ultrasonographically appear malignant. They may grow up to 20 cm in diameter, encapsulated, multiloculated, and may have papillary projections. <sup>2</sup>Czernobilsky *et al.* studied 34 patients with benign serous cystadenofibromas and found the same favorable outcome in all patients irrespective to whether they underwent conservative cystectomy, oophorectomy or total abdominal hysterectomy and bilateral salpingo-oophorectomy. In 1914 Kustner described atubal CAF associated with a hydrosalpinx<sup>3</sup>. In four cases, they were found incidentally during a hysterectomy for leiomyoma<sup>3, 4, 5, 6</sup> and in one case for prolapsed<sup>7</sup>. One case was found during lower segment cesarean section<sup>4</sup> and other during a tubal ligation<sup>8</sup>. One case was found associated with normal pregnancy<sup>4, 9</sup> and another occurred concurrently with an ectopic pregnancy<sup>10</sup>. A case of bilateral tumors presented with primary infertility<sup>11</sup> while another occurred during embryo transfer following in vitro fertilization<sup>12, 14</sup>. A case of CAF with torsion presented as an acute abdomen and was mistaken for appendicitis<sup>13, 15</sup>. CAF presents as a round solitary mass and can be found on the fimbrial end, intraluminally or on the serosal surface of the tube. Most are present at the fimbrial end. Most are cystic with coarse papillary excrescences as seen in the present case. Histologically two components are present, a connective tissue stroma without nuclear pleomorphism or mitosis and papillary structures or tubal structures lined by epithelial cells. The epithelial cell type has been serous in most cases but occasionally may be endometrioid<sup>4</sup>. Tumor seems to

have a benign course, and no malignant potential has been described. The differential diagnosis of a tumor of tubal origin includes tubal carcinoma, a serous papillary tumor of low malignant potential (STLMP) and borderline tumor.

### 4. Conclusion

Serous CAF of fallopian tube is rare lesion, usually small and asymptomatic. Preoperative diagnosis is difficult. As they are benign tumours, only cystectomy is required, decision of hysterectomy can be reconsidered. Patients over 50 years of age, presenting with any ovarian or fallopian tube tumor, there is no need for a conservative approach. In the treatment of younger patients of childbearing age, we found salpingo-oophorectomy to be curative without the need for any further treatment. However, long term follow-up of more cases are required to make more definitive conclusions. This case is presented on account of its rarity and we believe this is the first reported case of cystadenofibroma of the fallopian tube to present acutely and discovered during an appendectomy. This case is presented on account of its rarity.

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