

CASE REPORT

Primary Fallopian Tube Endometrioid Carcinoma -an uncommon histopathological variant

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Abstract

Endometrioid adenocarcinoma at the fallopian tube is extremely rare histopathological variant of fallopian tube cancer. A 42 year postmenopausal women presenting with lower abdominal pain and bleeding. Radioimaging showed left adnexal neoplastic mass lesion. Panhysterectomy specimen on histopathology reported as endometrioid adenocarcinoma of left fallopian tube with high grade stage IB as per FIGO system. We are presenting this case for its extreme rarity, clinical and histopathological findings.

Key Words

Fallopian tube carcinoma, Histopathology, Endometrioid adenocarcinoma

Introduction

Primary fallopian tube carcinoma are extremely rare tumors and account for approximately 0.1 to 1.8% [1,2]. The origin of fallopian tube carcinoma is from the transformation of the salphingeal mucosa. It has been noted that the women with fallopian tube cancer are more likely to be diagnosed earlier stage tumor with advanced diagnostic and therapeutic techniques, and also have improved overall survival. The careful surgical and histopathological staging is important for management of patients.

Case Report

A 42 year postmenopausal female presented with non-specific lower abdominal pain of 1 month duration. She had history of intermittent vaginal bleeding. Parity was P2L2. No other significant personal or family history was noted. On USG abdomen-pelvis showed normal uterus, cervix, bilateral ovaries and right fallopian tube. Left fallopian tube showed luminal mass lesion measuring 5.0 x 2.5x 1.5 cm which was solid, hetrogenous,irregular wall thickening, with mild vascularity suggestive of neoplastic tubal lesion. Patient underwent hysterectomy(Figure-1). On gross examination uterus with cervix measured 7.2 x 3.5 x 2.8 cms and weighs 40 gms. On cut section of endometrial canal measured 4 cm. Average endometrial thickness was 1 mm. The right fallopian tube, right and

left ovaries were unremarkable. The left sided fallopian tube was dilated and measured 5.6 cm in length and 2.7 cm in maximum diameter and the cut section of fallopian tube showed thickened wall and luminal solid, grey white tumor measuring 5.2 x 2.7 x 2.5 cm mostly in ampulla and extending partly to isthmus and infundibulum of left fallopian tube (Figure -2). No surface nodule were noted. On histopathology microscopic features showed (Figure-3,4) tumor growth as small glandular, solid pattern predominantly and a less papillary pattern. Neoplastic malignant cells were small, closely packed with numerous glandular spaces of varying sizes. Tumor showed increased mitotic activity. Tumor was infiltrating the tubal wall. There were no squamous metaplasia, spindled epithelial cells. In multiple serial sections from tube showed transition between benign and malignant tubal epithelium. It was reported as primary left fallopian tube adenocarcinoma - Endometrioid type grade III, Stage I B. Involved by tumor were isthmus, ampulla and infundibulum of left fallopian tube.

Discussion

The Primary Fallopian Tube Carcinoma (PFTC) is a rare tumor of the female genital tract. The diagnostic criteria for PFTC are: grossly, the main tumor is in the tube and arises from the endosalpinx; the histological pattern

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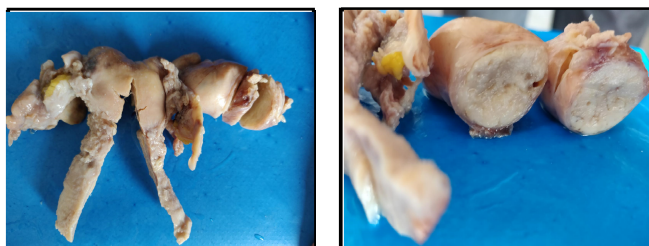


Fig 1. Hysterectomy Specimen Showing Left Sided Fallopian Tube Massig & Fig 2. Cut Open Left Sided Fallopian Tube Mass Showed Thickened Wall and Luminal Solid, Grey White Tumor Measuring 5.2 x 2.7 x 2.5 cm .

reproduces the epithelium of tubal mucosa; transition from benign to malignant tubal epithelium should be demonstrated, and ovaries and endometrium are either normal or have a much smaller tumor volume than that of the tube. [3] The clinical sign symptoms of abdominal pain, vaginal discharge and bleeding, adnexal mass were noted in most of these cases. The most of cases of PFTC are histological variety of serous (50%), endometrioid (25%), transitional (20%), others are undifferentiated, clear cell and mixed type. As the fallopian tube are commonly involved in secondarily from other site like endometrium, ovaries, breast malignancies. [4] The secondary malignancies are more often the results of metastasis of these tumors .In most of the cases the preoperative diagnosis is routinely not suspected. The few number of cases have been accidentally detected during pelvic or abdominal surgeries. Aggressive search should also be made for a concomitant primary or as an isolated metastatic secondary . [5] The endometrioid type is rare and shows typical intraluminal growth . On microscopic features shows tumor growth pattern as small glandular solid predominantly and a less papillary pattern. Tumor shows more mitotic activity. Neoplastic cells are usually grade II/III The study by Navani et al showed typical endometrioid carcinoma with other features of squamous differentiation, spindle cell and trabeculae. [6]

The most of patients are in an advanced stage at the time of diagnosis, which results in a poor prognosis. Ma Y and Duan W recommended complete surgical staging and maximal resection of the lesions. [7] As compared to epithelial ovarian cancers, fallopian tube carcinomas show a higher rate of retroperitoneal and distant metastases. [8]

Cormio G ,et al in study reported the 3 and 5 year survival rates of PFTC patients were 87.3% and 65.2%, respectively. [9] The few study indicates that endometrioid carcinomas of the fallopian tube are characteristically noninvasive or only superficially invasive and have a generally favorable prognosis. In our case tumor showed mostly luminal growth

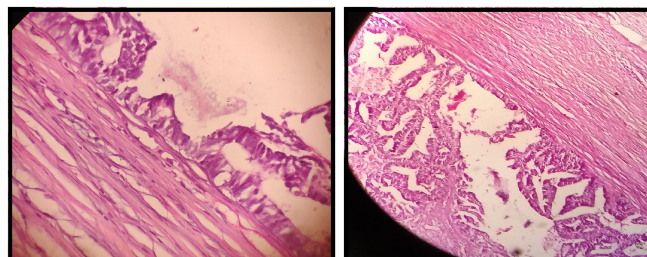


Fig3. Fallopian Tubal wall Showing Tumor Growth as Small Glandular, Solid Pattern (H&E Stain.100x) & Fig4 Fallopian Tubal Wall Showing Tumor Growth as Small Glandular, Solid Pattern (H&E Stain.100x)

with superficial invasion and stage IB as per FIGO system.

Conclusion

PFTC is a rare female genital tract malignancy. We are reporting very uncommon type of adenocarcinoma with endometrioid variant . As endometrioid carcinomas of the fallopian tube have favorable prognosis , this subtype of tubal carcinoma should be distinguished from the more common neoplasms of serous type and other variants.

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Nil.

Conflicts of Interest

There are no conflicts of interest.

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