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PRIMARY FALLOPIAN TUBE CARCINOMA CLINICALLY PRESENTING AS AN OVARIAN MASS : A RARE CASE REPORT

Histopathology

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ABSTRACT

Primary fallopian tube carcinoma is a rare tumor accounting for almost 0.14 – 1.8% of all female genital tract malignancies. It is difficult to diagnose pre-operatively due to its non-specific clinical presentation which simulates ovarian carcinoma. We are presenting a case of Primary Fallopian tube carcinoma (PFTC) which presented as an ovarian mass in a 45 year old female. Histopathological diagnosis was crucial in this case to confirm that the tumor arose from fallopian tube epithelium. PFTC is rarely considered a clinical diagnosis preoperatively and most patients undergo surgery with a presumed diagnosis of ovarian mass or tumor. The diagnosis of PFTC at early stages leads to better management and survival.

KEYWORDS

Fallopian tube, Primary malignancy, PFTC

INTRODUCTION

Primary malignancy of the fallopian tubes is one of the rarest diagnosis encountered with the first case being described by Renaud in 1847 [1]. It accounts for approximately 0.14 – 1.8% of all female genital tract malignancies [2]. Fallopian tube carcinoma is generally described as a disease in menopausal women as was the case in our patient. Due to its non-specific clinical presentation of colicky abdominal pain, bleeding per vaginum or vaginal discharge and overlapping picture in radiographic techniques, it is rarely a pre-operative differential diagnosis and histopathological examination of the mass is of utmost importance for diagnosis.

Case Report

A 45-year-old female presented with intermittent abdominal pain and vaginal discharge since six months. Ovarian mass was suspected and patient underwent total abdominal hysterectomy with bilateral salphingectomy. We received a specimen of uterus with cervix and separately sent fallopian tubes. One of the fallopian tubes measured 3cm in length along with single, uniloculated, paratubal cyst measuring 2 x 1.5cm filled with serous fluid and single, whitish friable mass attached to the same fallopian tube measuring 2 x 1cm. On cut opening the mass, solid areas were seen. Multiple sections were taken along with the attached mass.

Histopathology

Microscopy of the sections studied from the friable mass attached to the fallopian tube showed tumour arising from lining epithelium of fallopian tube and arranged in papillary structures, sheets and acini. The cells were round to oval with vesicular nuclei, prominent nucleoli bearing scant eosinophilic cytoplasm. Abundant mitotic figures, psamomma bodies, areas of necrosis were identified.

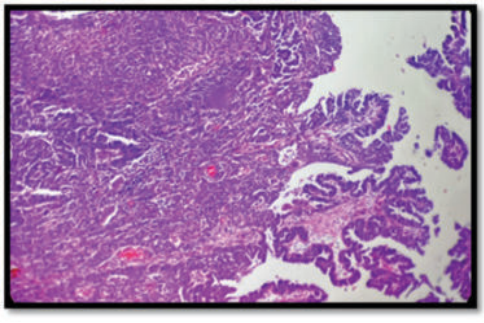

Fig 1: Low power view showing tumor cells arranged in papillary pattern and sheets.

Sections taken from the cervix showed papillary endocervicitis and a single nabothian cyst. The endometrium was in proliferative phase and the myometrium showed adenomyosis. There was no evidence of infiltration of malignant cells in uterus and surrounding adnexae, ruling out metastasis. Hence, a diagnosis of primary serous papillary adenocarcinoma of the fallopian tube was given.

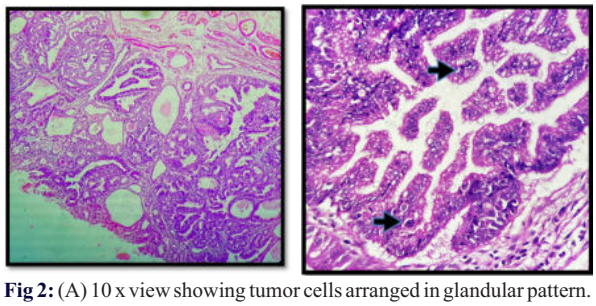

Fig 2: (A) 10 x view showing tumor cells arranged in glandular pattern. (B) High power view showing atypical mitosis (black arrows) and bizarre tumor cells.

DISCUSSION

Primary fallopian tube carcinoma is a rare gynecologic malignant tumor accounting for approximately 0.14 – 1.8 % of all female genital malignancies. Majority cases are seen in post – menopausal women with a mean age of 60 years [4]. It presents with intermittent serosanguineous vaginal discharge, pelvic mass and colicky abdominal pain (Latzko's triad) [5]. The diagnostic criteria for PFTC was first proposed by Hu et al. [6], and later modified by Sidles. It includes that the tumor should arise from the endosalpinx, histologically reproduce the fallopian tube epithelium with transition from benign to malignant and the ovaries should be either normal or with small tumor burden. All these criteria were fulfilled in our case.

Involvement of bilateral fallopian tubes is reported to occur in only 3% of the patients [8]. There are various histological patterns and types of primary fallopian tube carcinoma: serous, endometrioid, mixed, undifferentiated, clear cell, transitional and mucinous; are among some of them. The serous and endometrioid types are the most common [9].

CA-125 is a sensitive marker for early detection and progression of tumor in post-operative follow up and relapse cases [7]. Aggressive cytoreductive surgery with removal of as much tumor mass as possible is the treatment of choice for PFTC [10]. Adjuvant radiotherapy and chemotherapy are considered as treatment options in patients with higher staging or presence of metastatic distant spread [11].

CONCLUSION

Due to low pre-operative clinical suspicion for primary fallopian tube malignancy, two-thirds of patients have advanced disease by the time it is diagnosed. Although clinical signs and symptoms are non-specific, yet histopathological examination being the gold standard helps in

arriving at the correct diagnosis as well as evaluation of the disease spread and overall prognosis of the patient.

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