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Fallopian Tube Carcinoma: A Differential Diagnosis of Ovarian Cancer.

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Background: Primary fallopian tube carcinoma is rare, difficult to diagnose preoperatively though the management is similar to ovarian cancer.
Case report: We report a 55 years old, Para three, woman who presented with postmenopausal bleeding and unilateral adnexal mass and clinically diagnosed as estrogen secreting ovarian tumor which turned out to be primary fallopian tube cancer on laparotomy and histopathology.
Conclusion: In any woman who presents with postmenopausal bleeding and a unilateral adnexal mass, with normal cervix, uterus and endometrium, the differential diagnosis of fallopian tube carcinoma should be kept in mind.

Introduction

Primary fallopian tube carcinoma is an uncommon tumor accounting for approximately 0.14% to 1.8% of female genital malignancies[1]. The first classic case was reported in 1886 by Orthman[2]. It arises in postmenopausal women with a wide age range having a mean age of 52 years. It is possible that the true incidence of fallopian tube carcinoma has been underestimated because some cases may have been mistakenly identified as an ovarian tumor during initial surgery and / or during microscopic examination by a pathologist as the histological appearance of the tumor is identical. The preoperative diagnosis is usually difficult and the most of the patients with fallopian tube carcinoma undergo laparotomy with presumed diagnosis ovarian carcinoma. Here we report a case which was diagnosed preoperatively as an ovarian tumor but operative findings suggested fallopian tube carcinoma which was confirmed by histopathological examination of the specimen.

Case Report

A 55 years old woman, Para three, menopausal for five yrs, presented to the gynae outdoor with postmenopausal bleeding for 15 days. There was no history of post coital bleeding, discharge per vaginum, pain abdomen or abdominal distension. Systemic and per abdomen examination did not show any significant observation. On per vaginum examination the cervix and the uterus were normal, and there was a fixed and non tender mass of size 5X5 cm in the left fornix and the right fornix was clear. Ultrasonography revealed an ill defined hypoechoic solid mass of size 4X5 cm in left adnexa showing flow on color Doppler and the right ovary was normal and endometrial thickness was 3 mm. CT scan also reported the same findings. CA-125 levels were 670 U/ml. Endometrial sampling showed atrophic endometrium. Possibility of an estrogen secreting ovarian tumor was kept in mind due to postmenopausal bleeding and ovarian mass.

The patient was taken up for staging laparotomy. On exploration, the uterus, the right ovary and the right fallopian tube were normal and on left side there was a hard adnexal mass of size 5X6 cm size involving the fallopian tube and invading the normal looking ovary. Total abdominal hysterectomy with bilateral salpingo-oophorectomy, bilateral pelvic lymphnode sampling, infracolic omentectomy and peritoneal biopsy was done. Histopathology revealed primary papillary adenocarcinoma of left fallopian tube infiltrating ovary in a diffuse and nodular pattern (Figure 1).

Mental and peritoneal biopsy didn't show any tumor infiltration. Post operative period was uneventful and patient was planned for six cycles of 3 weekly paclitaxel and carboplatin based chemotherapy.

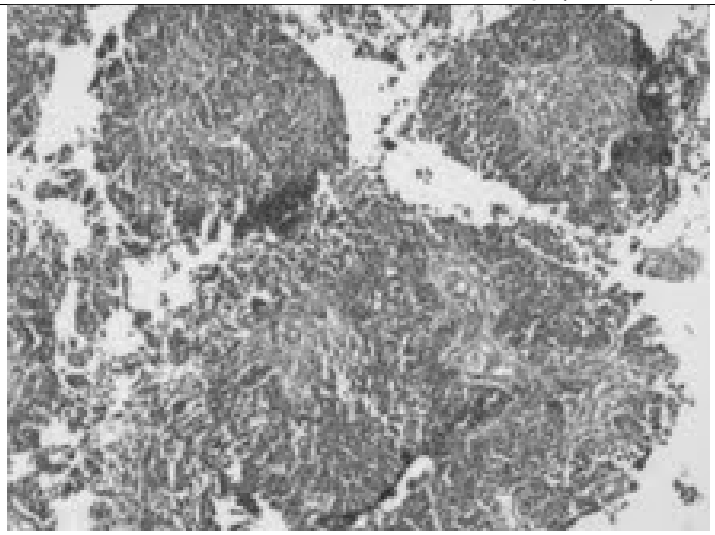

Figure 1. Histopathology showing fallopian tube carcinma

Discussion

Primary fallopian tube cancer is the least common of all gynecologic malignancies. For many years, it has been considered to account for only 0.5% of gynecologic cancers, but this figure may be low because carcinoma of uncertain origin involving both ovary and tube are generally classified as ovarian in view of their much higher overall frequency. It is mostly seen in the ampulla, bilateralism has been reported in 10% to 20% of cases. About half of the tubal carcinomas are serous, roughly a forth are endometrioid, a fifth are transitional or undifferentiated and the remainder are of other rare epithelial cell types[3].

The most common symptoms, which is seen in two thirds of patients is postmenopausal bleeding. But the distinctive presentation is of intermittent, profuse, watery, clear to yellow (cholesterol-rich) vaginal discharge accompanied by colicky abdominal pain. There are a few case reports of rare presentations like tubo-ovarian abscess also[4]. The present case also presented as postmenopausal bleeding which is usually the symptom of carcinoma cervix, carcinoma endometrium, and estrogen secreting ovarian tumor. But the uterus, cervix and endometrial curettings were normal in this case.

On ultrasonography the mass is rarely suggestive of tubal origin, unless the ipsilateral ovary is identified. Although CA-125 per se is not diagnostic for fallopian tube carcinoma, more than 80% of patients have elevated pre-treatment serum CA-125 levels.[5] In this patient also CA-125 levels were 625 U/ml. Only in fewer than 5% of cases it is suspected preoperatively. In the present case patient presented with postmenopausal bleeding with adnexal mass which was thought to be due to estrogen secreting ovarian tumor and possibility of primary fallopian tube cancer was not kept in mind due to its rarity. The diagnosis of fallopian tube cancer was suspected on per operative findings when fallopian tube was involved by the tumor and was invading the normal looking ovary. Histopathology confirmed the diagnosis. Surgery is the treatment of choice and postoperative chemotherapy is similar to that used for ovarian cancer as in this case patient was planned for paclitaxel and carboplatin based chemotherapy.

Conclusion

If there is a unilateral adnexal mass with postmenopausal bleeding or profuse vaginal discharge, with normal endometrial thickness and endometrial curettings, the possibility of primary fallopian tube carcinoma should be kept in mind as a possibility.

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