CASE REPORT

Malignant Mixed Mullerian Tumor of Endometrium Coexisting with Bilateral Papillary Serous Adenocarcinoma of Fallopian Tube: A Rare Case Report

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Introduction

Malignant mixed mullerian tumor of the female genital tract is a rare neoplasm of uncertain histogenesis. Malignant mixed mullerian tumors are uterine neoplasms which are composed of a mixture of malignant epithelial and mesenchymal elements. Primary adenocarcinoma of the fallopian tube is a rare tumor of the female genital tract accounting for only 0.3–1.1 % of all gynecological malignancies. Bilateral involvement occurs in 20 % carcinomas. A rare case of Malignant mixed mullerian tumor of endometrial polyp with associated bilateral fallopian tube papillary adenocarcinoma is being reported.

Case Report

Mrs. X, 43 year old, P2L2 presented to our hospital on March 24, 2009 with complaints of continuous bleeding PV and lower abdominal pain since the preceding 1 month.

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She also gave history of inter-menstrual bleeding since past 6 months—her previous cycles being regular.

On examination, her vitals were stable. Per abdominal examination was normal; per speculum examination revealed a polypoid growth—1 × 1 cm arising from the endometrial cavity; and cervix appeared healthy. On per vaginal examination, the uterus was found to be of anteverted, normal size; Fornices free. Hemogram, urine analysis, biochemical parameters, and chest X ray were within normal limits. Pap smear was negative for malignancy. USG showed normal-sized anteverted uterus with endometrial thickness of 5.4 mm, with ovaries being normal, and no free fluid. CT scan also revealed no abnormality.

Hysteroscopy and D&C with polypectomy were planned. On hysteroscopy, a polypoid growth was seen arising from left lateral wall of the uterus, and the rest of the endometrium appeared normal. The polyp was resected and along with endometrial currentings, it was sent for histopathology.

Histopathology of polyp showed biphasic appearance of tumor cells arranged in well-formed glands of solid sheets with papillary structures with hyperchromatic nuclei. Stromal cells were oval/spindle shaped with pleomorphic nuclei, suggestive of Malignant mixed mullerian tumor, and the rest of the endometrium was in secretory phase.

In view of above diagnosis, the woman was posted for exploratory laparotomy. Peritoneal cytology was negative for malignant cells; abdomen was explored and found to be free of any metastasis.

Preoperatively made observations were uterus was 8 weeks size; and bilateral tube tortuous and dilated, both ovaries—normal. Total abdominal hysterectomy with bilateral salpingo-oophorectomy were done (Fig. 1).

To our surprise, histopathologic examination showed papillary serous adenocarcinoma of bilateral fallopian tubes. Cervix, ovaries, and uterine cavity were normal, and no metastatic deposits were noted (Fig. 2).

A histologic diagnosis of bilateral papillary serous adenocarcinoma of bilateral fallopian tube with Malignant mixed mullerian tumor confined to endometrial polyp was made (Fig. 3).

Postoperatively, patient has received five cycles of chemotherapy (carboplatin: 600 mg). The patient remains asymptomatic and is still under regular follow up.

Discussion

Malignant mixed mullerian tumors are composed of a histologic mixture of sarcoma/carcinoma. The carcinomatous element is usually glandular, whereas sarcomatous element may resemble normal endometrium (homologous) or composed of tissue foreign to the uterus such as cartilage/bone/striated muscle. They usually arise in postmenopausal women. Common symptoms are vaginal discharge/post menopausal bleeding/pelvic pain. In 50 % cases, a polypoid mass may be seen protruding from endocervical canal.

Our finding of Malignant mixed mullerian tumor confined to endometrial polyp has been reported earlier in the literature [1, 2]. These cases indicate that Malignant mixed mullerian tumor of limited extent may not be associated with dismal prognosis if surgery can be done, while tumor is confined to a polyp.

Various therapeutic modalities have been employed in the treatment of Malignant mixed mullerian tumor. Surgery in the form of TAH + BSO remains the principal

treatment. Adjuvant chemotherapy has been found to be beneficial [3].

In the present case, though the Malignant mixed mullerian tumor was limited to a polyp, a surprise diagnosis of fallopian tube carcinoma was made upon histopathologic examination.

Primary fallopian tube carcinoma was first described by Renand 1897. Although the etymology of the tumor is unknown, associations with tubal inflammation, infertility, tuberculous salpingitis, and endometriosis are suggested. Cytogenetic studies show the disease to be associated with p53, Her2/neu and c-myb, BRCA1, and BRCA2 mutations [4]. Most patients are asymptomatic. Other presenting symptoms are abdominal pain, and abnormal vaginal discharge/bleeding/adnexal mass.

Preoperative diagnosis is difficult because of the rarity, lack of specific findings, and silent natural course. It is a challenge to gynecologists. CA125 helps in prognosis and follow up. Treatment includes staging laparotomy with abdominal hysterectomy followed by chemotherapy.

Fig. 2 Shows microscopic picture of papillary serous adenocarcinoma of fallopian tube

Fig. 1 Shows gross specimen of uterus cut open with both fallopian tubes and ovaries

Fig. 3 Shows microscopic picture of malignant mixed mullerian tumor of endometrial polyp

Optimally cytoreduced patients with primary fallopian tube carcinoma treated with platinum/paclitaxel-based chemotherapy have an excellent possibility of survival [5].

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