

Placental Site Trophoblastic Tumor: A Case Report.

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Citation

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Abstract

A placental site trophoblastic tumour is a rare form of gestational trophoblastic neoplasia with a reported incidence of 1-2 % of all trophoblastic tumours. They have a varied clinical spectrum and usually present with irregular vaginal bleeding or amenorrhoea. They are commonly seen in reproductive age group and can occur after normal pregnancy, abortion or following gestational trophoblastic disease. Surgery is the mainstay of treatment. We present a case which was retrospectively diagnosed as placental site trophoblastic tumour following hysterectomy for abnormal uterine bleeding.

INTRODUCTION

Placental site trophoblastic tumor (PSTT) is the least common form of gestational trophoblastic neoplasia composed of predominantly intermediate trophoblasts. Since 1981, about 150 cases have been reported in literature.

CASE REPORT

A 25 year old woman, P2L2, attended our outpatient department with complaints of menorrhagia and moderate dysmenorrhoea of one year duration. Her last menstrual period (LMP) was 10 days prior and she was bleeding for the past 10 days. She had two previous normal vaginal deliveries and the last childbirth was 2 years back. She had no significant past medical or surgical history. On examination, she had marked pallor with stable vital parameters. Her pelvic examination showed first degree uterine descent with bulky anteverted uterus. Her hemoglobin was 5.4 gm%. Transvaginal ultrasound showed bulky uterus with fundal submucous fibroid of size 3.3 x 3.9 x 3.2 cm.

During the hospital stay she had a severe bout of bleeding not responding to high dose progesterone or tranexamic acid. Urine pregnancy test (UPT) was done to rule out pregnancy related complications including gestational trophoblastic neoplasia (GTN) but was negative. A repeat Doppler-aided transvaginal ultrasonography revealed an ill-defined, vascular tumour invading the myometrium near the fundus. Therapeutic curettage was done, keeping everything ready for vaginal hysterectomy in view of the highly vascular nature of the tumour and material sent for tissue diagnosis.

After curettage, bleeding stopped and she was transfused with four units of packed cells. Histopathological report showed simple hyperplasia of endometrium with focal areas of atypia and adenomatous polyp with surface ulceration. Based on histopathological report and taking into consideration her young age, patient was advised for medical management with the need for strict follow up in view of focal areas of atypia. However, patient was unwilling for the same, and opted for surgical management.

After obtaining informed consent, vaginal hysterectomy was done. Intraoperative period was uneventful except for increased vascularity. Specimen revealed a bulky, soft uterus with left cornual sub mucous fibroid of 3x3cm size and a right cornual bluish hemorrhagic mass of 3x3 cm size. The postoperative period was uneventful and she was discharged on the fifth postoperative day with instructions to report for follow up after two weeks.

The histopathological report of the specimen suggested chronic endometritis with hyperplastic basal endometrium, leiomyoma and degenerated placental polyp resembling placental site trophoblastic tumour. With diagnosis of PSTT, we sent a communication to the patient to report for follow-up. However, she never turned up for the same, despite subsequent communications sent to her address.

Figure 1

Figure 1. Bulky, soft uterus with left cornual sub mucous fibroid of 3x3cm size and right cornual bluish hemorrhagic mass of 3x3 cm size.

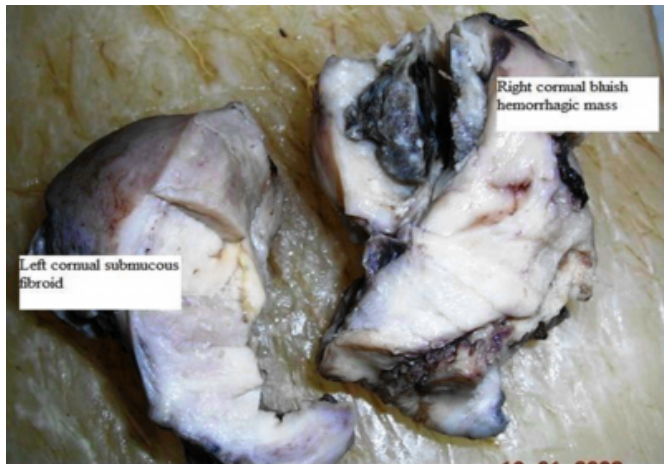


Figure 2

Figure 2. Microscopic picture showing large polygonal cells infiltrating the myometrium.

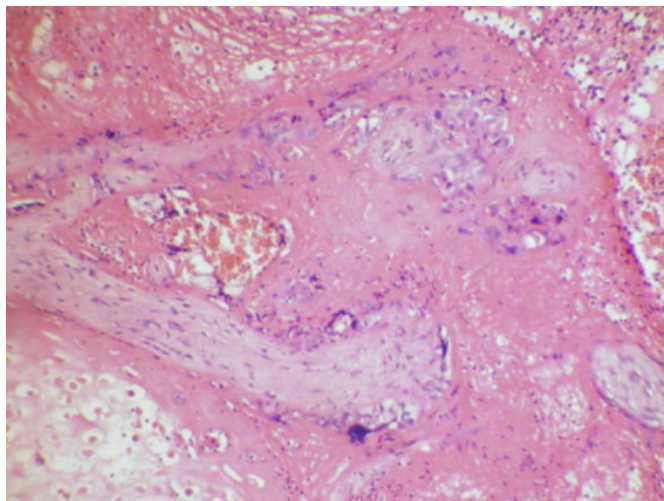
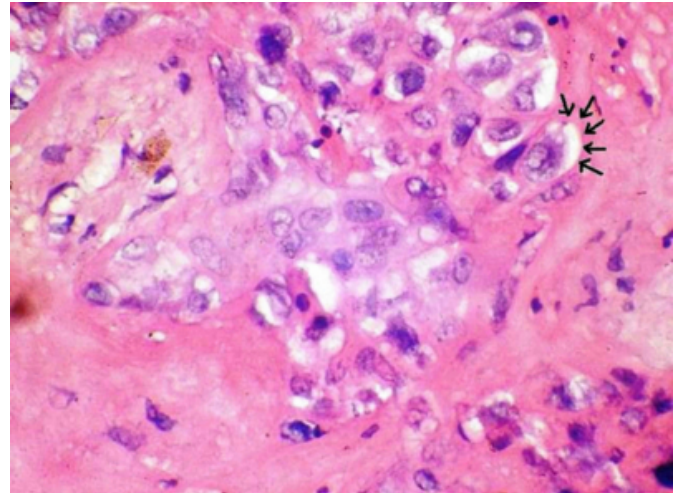


Figure 3

Figure 3. Microscopic picture showing monomorphic intermediate trophoblasts .



DISCUSSION

Placental site trophoblastic tumour is a rare form of gestational trophoblastic neoplasia (1-2%). It is usually seen in the reproductive age group and can follow a normal pregnancy, abortion or gestational trophoblastic disease². The common presenting symptoms are irregular vaginal bleeding and amenorrhoea. It is more likely to occur after pregnancy with female fetus. Our patient had two normal vaginal deliveries and her last child was female.

Histopathologically, it is characterised by a neoplastic monomorphic population of implantation-like intermediate trophoblastic cells, extensively infiltrating the myometrium. The tumor cells are positive for human placental lactogen but rarely for human chorionic gonadotropin³. Hence, a raised HPL level and a normal to slightly elevated HCG level is valuable in diagnosing PSTT. Though UPT was negative, we have not assayed serum β -HCG or HPL levels as it was a retrospective diagnosis from hysterectomy specimen. The imaging findings of PSTT are nonspecific, the tumor appears as an endometrial or myometrial mass and can be hyper vascular or hypo vascular⁴. Our case was a hyper vascular type infiltrating the myometrium. Although it has been recommended to avoid dilatation and curettage in hyper vascular tumors, paradoxically our patient stopped bleeding after curettage.

About 10-15% of PSTT can be clinically malignant commonly metastasising to lung and vagina. Occurrence of CNS metastasis is considered a poor prognostic factor⁵. Other prognostic factors include interval from antecedent pregnancy (> 4 years indicating poor prognosis), age, FIGO

staging and mitotic count>5 per high power field.

Surgery remains the cornerstone of therapy. Remission rates up to 100% have been reported with disease limited to uterus. Women with metastatic PSTT at the time of diagnosis require chemotherapy. Recent data from Charing Cross hospital and other centers indicate EMA/EP as the most effective treatment for metastatic and recurrent PSTT². Our patient had certain good prognostic factors like age < 40, antecedent pregnancy < 2yrs and disease confined to uterus and a definitive surgery like vaginal hysterectomy conducted. However, as our patient was lost to follow up, we are unable to determine the outcome in this case.

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