CASE REPORT

Ruptured tubal molar pregnancy

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Abstract

Molar pregnancies in most instances develop within the uterine cavity, but may occur at any site. Ectopic molar pregnancy is a rare event. The objective of this study was to present a case of ruptured tubal molar gestation, discuss its clinical features and ways to improve diagnostic accuracy. A 35-year-old woman presented with features suggestive of ruptured tubal ectopic pregnancy. There was neither any evidence at the time of presentation to suspect a molar gestation, nor β human chorionic gonadotrophin (βhCG) hormone estimation was done, but only a clearview pregnancy test was carried out. She had total left salpingectomy and histological evaluation of the specimen revealed complete hydatidiform mole. The hCG level normalized within 3 weeks of follow-up. Clinical features of ectopic molar pregnancy may be indistinguishable from non-molar ectopic pregnancy. We recommend βhCG estimation as well as histological examination of the surgical specimen for all patients coming with features suggestive of ectopic pregnancy.

Key words: Molar pregnancy, ectopic pregnancy, Kano, Nigeria

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Introduction

Gestational trophoblastic diseases (GTDs) constitute a spectrum of tumors and tumor-like conditions characterized by abnormal proliferation of pregnancy-associated trophoblastic tissue with progressive malignant potential.[1] GTD is classified into premalignant disease, termed complete and partial hydatidiform mole (CM, PM), and malignant disorders (invasive mole, placental site trophoblastic tumor and choriocarcinoma).[1]

The incidence of GTD varies in different regions of the world. The incidence in the US is 1 per 1000 pregnancies, in the UK 1.5 per 1000, in Japan 2 per 1000 and in Nigeria the incidence was found to be 2.4 per 1000 pregnancies.[2-5]

Based on the absence or presence of a fetus or embryonic elements, hydatidiform mole has been classified into complete and partial moles.

In most instances, moles develop within the uterine cavity, but may occur at any site. Ectopic molar pregnancy is a rare event. The first report on tubal mole was published in 1871 by Otto.[6] The incidence of ectopic hydatidiform mole was found to be 1 per 1,000,000 pregnancies.[7] Patients with tubal molar pregnancy are very difficult to distinguish from patients with non-molar tubal pregnancy by means of presenting signs, symptoms or laboratory test.[8] Human chorionic gonadotrophin (hCG) level is elevated in molar intrauterine pregnancies, but found to be in lower range in tubal molar pregnancy because implantation in the fallopian tube precludes adequate vascularization, and therefore may not be a good marker to diagnose this condition.[9] Accurate histopathologic assessment of such cases remains the most reliable method of diagnosing these cases.[4] Deoxyribonucleic acid flow cytometry is required to determine the ploidy status of the lesion and distinguish between CM and PM once the diagnosis of molar pregnancy is made histologically.[4] However, it does not help to distinguish CM from hydropic miscarriage. Management of ectopic molar gestation includes immediate removal of conceptus either via laparotomy or laparoscopically, followed by histological evaluation of the specimen and

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follow-up using serial βhCG measurements similar to other trophoblastic tumors.[6] The outcome of the treatment of these patients is similar to those coming with non-molar ectopic gestation.

We report a rare condition of ruptured tubal molar gestation.

Case Report

A 35-year-old woman, G5 Para 2+2 1 Alive, presented to the gynecological emergency ward of Aminu Kano Teaching Hospital (AKTH, Nigeria) on 16/08/08. She was unsure of her last menstrual period, but it was approximately 12 weeks earlier. She complained of non-radiating, severe and sharp lower abdominal pain which was not associated with dizziness or syncope and there was no vaginal bleeding.

Her first pregnancy in 1995 was uncomplicated and she delivered a live male baby at term that died shortly after delivery. The second pregnancy was also uncomplicated and she delivered a live female baby. The third and fourth pregnancies were spontaneous miscarriages at approximately 8 weeks of gestation in 2000 and 2001, respectively. She was managed using manual vacuum aspiration following the miscarriages. The postabortal period was uncomplicated following the first one, but she had intermittent bleeding per vaginum and two re-evacuations after the second miscarriage in a private clinic, without any histological evaluation. Prior to her coming to AKTH, she continued to have recurrent spotting for nearly 4 months before she presented to us, and a third evacuation was done. The histological examination of the product of conception following this last evacuation revealed choriocarcinoma. She was put on Methotrexate, Actinomycin-D and Cyclophosphamide (MAC regimen) and was on combined oral contraceptive pills for 2 years. She was subsequently managed as a case of secondary anovulatory infertility, based on low day 21 progesterone levels (0.6 ng/l). Hysterosalpingographic assessment revealed left hydrosalpinx, but with free peritoneal spillage of contrast medium bilaterally; the finding of damaged tube may have contributed to her developing the ectopic. She had ovulation induction with clomiphene citrate and missed her period following the third course. She was advised to do pregnancy test and pelvic ultrasound, but presented only 12 weeks later with the above complaints.

On general examination, she was in pains, but not pale and anicteric. The pulse rate was 84 beats per minute and her blood pressure was 130/80 mmHg. The abdomen was generally tender, but not distended, with guarding and rebound tenderness in the left iliac fossa.

Pelvic examination revealed normal external genitalia, closed cervix and positive cervical excitation tenderness. There was a left-sided adnexal mass, whose size could not be appreciated because of tenderness; however, examining finger was stained with blood.

She had a positive pregnancy test. Pelvic ultrasound revealed an empty uterus, but the endometrial plate was thickened. There was a roundish, mixed echogenic, well-encapsulated mass in the left adnexum, measuring 79.8 × 50 mm, with no fetal pole, and the right adnexum was normal. There was significant fluid collection in the pouch of Douglas.

An assessment of ectopic pregnancy was made and the patient was optimized and an emergency exploratory laparotomy performed, where hemoperitoneum of about 600 ml was found. There was a left tubal gestation containing grape-like residue and normal right tube and ovaries. In view of these findings, she had left total salpingectomy. Histopathologic evaluation of the left salpingectomy specimen confirmed the diagnosis of the left fallopian tube hydatidiform mole. The postoperative period was uneventful and she was discharged home after 5 days. She was seen every 2 weeks in the gynecological clinic and monitored by βhCG tests until three consecutive falling levels were attained [βhCG levels within 3 weeks of follow-up: 1500 IU/L (1st week), 750 IU/L (2nd week) and 4 IU/L (3rd week)]. She was subsequently placed on combined oral contraceptive pills for a period of 1 year.

Discussion

The most common form of GTD worldwide is molar pregnancy, with the highest incidence amongst women in the extremes of reproductive age, i.e. over 45 years and under the age of 15, in women who lack carotene and animal fat, in those with history of spontaneous abortions and previous molar gestation (risk of recurrence is 1–2%) and in those whose husbands are exposed to soil and dust.[2-6]

The case presented is a rare event. However, tubal molar pregnancy may be overdiagnosed because it is difficult to differentiate from non-molar hydropic abortions and early placentation, as non-molar tubal pregnancies may also exhibit hydropic villi.[10,13] No single diagnostic method can confirm the presence of a mole with 100% accuracy. Diagnosis depends upon the correlation of clinical and pathological features. However, patients with tubal molar pregnancy are clinically indistinguishable from those with traditional tubal pregnancy and βhCG levels may not be as high as in non-ectopic hydatidiform mole. So, accurate histopathologic assessment as well as repeated βhCG determination of such cases is mandatory to assess the persistent proliferative activity of trophoblast.[9-11] Better differentiation, however, can be achieved with DNA flow cytometric analysis.[5] It helps in distinguishing between CM and PM once diagnosis of hyadatidiform mole is made

histologically, but cannot be used alone for diagnosis. Therefore, a combination of histological features and DNA flow cytometry is necessary for the assessment of cases of suspected tubal ectopic hydatidiform mole.[12,14] This may help reduce the incidence of overdiagnosis of tubal hydatidiform mole.[9] However, such technique is not available in our center. It is important to distinguish ectopic molar pregnancies from ectopic non-molar pregnancies as molar pregnancies can potentially be complicated by persistent trophoblastic disease and malignant transformation as in intrauterine molar pregnancy, which requires longer period of follow-up. Postoperative follow-up of patients such as the present case requires full monitoring of the beta hCG levels till they normalize, adequate counseling and contraceptive usage. Close monitoring to detect early complications of persistent trophoblastic activity is most essential too. This will prevent overdiagnosis of molar pregnancy which may lead to inappropriate follow-up care, delayed attempts at conception, exposure to chemotherapeutic agents and increased medical expense. This patient was fully monitored to avoid the complications.

Conclusion

Tubal molar pregnancy is a rare event. Clinical diagnosis is difficult and the clinical features may be indistinguishable from non-molar ectopic pregnancy. It is important and recommended to conduct a histological analysis of all specimens removed at laparotomy for ectopic pregnancy so as to detect early complications of malignant potential as in intrauterine molar pregnancy.

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