CASE REPORT

Partial Invasive Molar Pregnancy: Two Case Reports

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Abstract

Gestational trophoblastic disease encompasses several entities like complete mole, partial mole, invasive mole, gestational trophoblastic carcinoma and trophoblastic carcinoma from implantation site. These entities are different from each other by their origin, morphology, their evolution and their treatment. Among all components, partial mole is very common (90%) and triploid genetically. This is one of the important causative factors of miscarriages. Very rarely (2-4%) partial mole can develop into invasive one presenting with features of incomplete abortion, missed abortion and sometimes as obstetric emergencies like intraperitoneal hemorrhage and torrential vaginal bleeding. So, proper diagnosis and timely intervention can prevent mortality and reduce morbidity of the patients. Here we report two such cases of partial invasive molar pregnancies with varied picture.

Keywords: Molar pregnancy, Hydatidiform, Gestational trophoblastic neoplasms (GTN).

INTRODUCTION

Molar pregnancy is characterized histologically by abnormalities of chorionic villi consisting of varying degrees of trophoblastic proliferation and edema of villous stroma. It has been classified into complete and partial mole according to the absence or presence of fetal or embryonic elements. Some of these molar pregnancies fail to regress following primary treatment and result in gestational trophoblastic tumors which can be invasive mole, choriocarcinoma, persistent trophoblastic tumor and placental site trophoblastic tumor.[1] Partial hydatidiform mole is less likely than a complete mole transforms into malignant disease after treatment. But 2 to 4% of women with partial molar pregnancies may develop complication like invasive mole or choriocarcinoma.[2,3] Here we report two such rare cases of partial invasive molar pregnancies presenting with irregular heavy bleeding per vagina with anemia following termination of pregnancy.

CASE HISTORY

Case 1

A 25-year-old female reported on 28th Nov 2008 to the Gynecology Outpatient Department of KPC Medical College, Kolkata complaining vaginal bleeding for three weeks following D&E done for nine weeks of gestation. She was also having dull aching pain abdomen, vomiting and generalized body weakness. D&E was performed due to failed medical method abortion. She was married for six years with a living issue born by LSCS. On admission her vital status and general condition were poor showing severe degree of pallor, tachycardia (120/min), tachypnoea (32 breaths/min) and BP of 90/50 mmHg. Her respiratory and cardiovascular examinations revealed no abnormality. On abdominal palpation, there was no mass but there was tenderness over hypogastrium. Per speculum and bimanual examination revealed a bulky uterus with free fornices. Internal os was admitting tip of finger and blood was coming through the os. Local pathology of vagina and cervix were excluded. Her base line investigation showed Hb-5.8 gm%, TLC-8,330/mm,^{3} normal differential count, ABO/Rh- O +ve, urine R/E-NAD, S TSH-1.39 mIU/ml and total platelet count—1.75 lakhs/ml. Blood sugar level, renal and liver function tests were all within normal limit. The striking rise of serum hCG level (11,203 mIU/ml) was noted. Ultrasonography of pelvis revealed a bulky uterus (124 × 74 × 38 mm) with a hypoechoic mass having small irregular cystic foci in its lower part of the body and myometrium was grossly thinned out in the left anterolateral aspect. Ovaries were normal sized. It suggested the provisional diagnosis of an invasive mole. After resuscitation, she was taken for D&E with informed consent of hysterectomy. Torrential hemorrhage started after curetting and there by subtotal hysterectomy was done as a life saving measure. The gross appearance of the bisected uterus showed a necrotic mass inside the endometrial cavity, which was penetrating to the myometrium (Fig. 1). Initially histopathology of curetting showed presence of products of conception and later on hysterectomy specimen of uterus revealed the presence of invasive mole (Fig. 2). In intra- and postoperative period, she received 5 units of blood transfusion and other supportive measures. Recovery was uneventful. She was planned for chemotherapy with injection (Inj.). Methotrexate 1 mg/kg body weight by intramuscular route

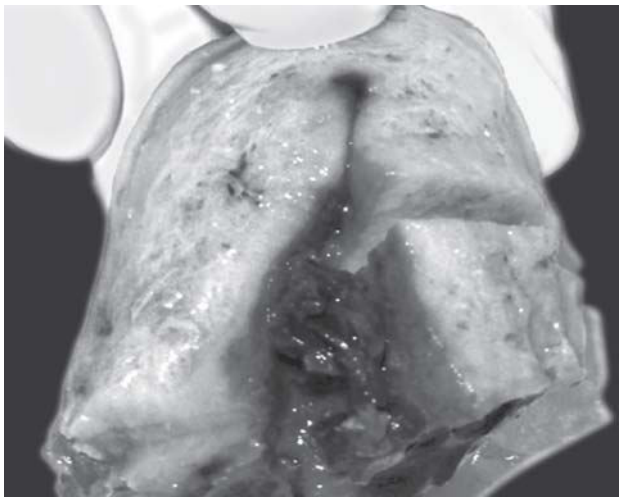

Fig. 1: Bisected uterus showing invasive mole *in situ*

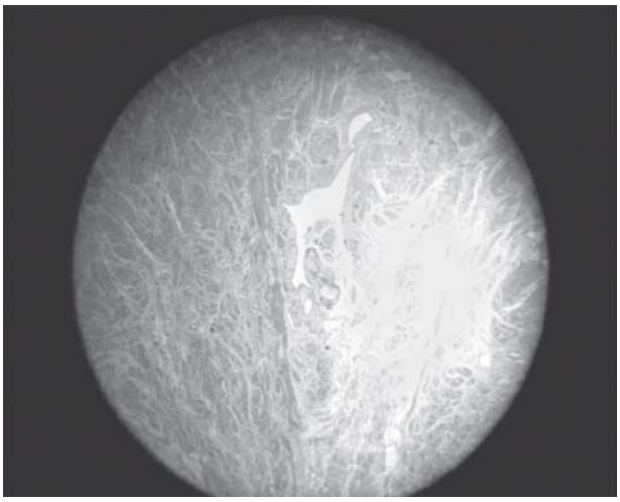

Fig. 2: Microscopic picture of trophoblastic tissue invading muscle fibers. He stain 100x

weekly for total four doses with folinic acid rescue at 21 days interval. With first course of chemotherapy, she was discharged and followed up with weekly serum hCG report and other tumor work ups. On her sixth week follow-up serum hCG was 1.43 mIU/ml.

Case 2

Mrs TM, 32-year-old female, G2, Pl+0 at 10 weeks of gestation was admitted on 7th Feb 2007 in the emergency ward of Obstetrics and Gynecology Department, IPGME & R, Kolkata with the chief complain of bleeding per vagina for 20 days. General and systemic examinations revealed no abnormalities. On per speculum and bimanual examination, there were signs of inevitable abortion. D&E was done after obtaining informed consent. Histopathology of products of conception showed the features of partial molar pregnancy. Base line and other special investigations were within normal limits except a raised serum β-hCG(35,405). She was treated with single agent chemotherapy, i.e. 3 courses of Methotrexate (1 mg/kg body weight) and follinic acid. Patient showed improvement by reduction of symptoms as well as serum β-hCG. During her follow-up period unfortunately she returned to our outpatient department again with complain of profuse bleeding per vagina. There was raised β-hCG level 12,304 mIU/ml. Emergency hysterectomy was carried out.

Histopathology confirmed the presence of invasive mole.

DISCUSSION

Gestational trophoblastic neoplasms (GTN) are proliferative as well as degenerative disorders of placental elements and include complete or partial mole (90%), invasive mole (5-8%), choriocarcinoma (1-2%) and placental site tumor (1-2%).[4] 15% of complete mole can develop into invasive mole.[1] But only 2-4% of the partial mole transform into this variety of trophoblastic tumor.[2,3] Invasive mole usually presents with following symptoms :irregular vaginal bleeding, theca luteine cysts, uterine subinvolution or asymmetric enlargement and persistently elevated serum hCG levels.[1] It can develop both before and after treatment by D&E or S/E.[3] The trophoblastic tumor may perforate the uterine myometrium resulting intraperitoneal bleeding and vaginal bleeding. Treatment may include single or combined chemotherapy according to patient profile and risk status. Histopathology of invasive mole usually shows sheets of anaplastic syncytiotrophoblast and cytotrophoblast without chorionic villi.[1] Our two cases have reported to us with complains of persistent vaginal bleeding and showed a constant rise of serum hCG. The histopathology report also documented the presence of partial molar pregnancies with transformation to invasive moles later on. Considering the rarity of the cases and similar clinical presentations, these case reports are unique. These cases emphasize the necessity of doing ultrasonography before terminating any disturb pregnancy in early trimester and carrying out histopathology examination of tissue for avoiding possibility of missing any case of gestational trophoblastic disease. Thus, early diagnosis can be possible and adequate, and prompt treatment with proper follow-up can be instituted to have good success rate.

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