

**CASE REPORT**

Invasive Mole presenting as Acute Abdomen

Amandeep K Anand, Shashi Gupta, Vikram Mahajan, Rajat Gupta*, Rajni Gupta

Abstract

We present a rare case of invasive mole presenting as pain abdomen and bleeding per vaginum with subsequent hemoperitoneum. Emergency hysterectomy confirmed the presence of molar pregnancy perforating through the fundus.

Key Words

Gestational Trophoblastic Disease (GTD), Gestational Trophoblastic Neoplasia (GTN), Invasive Mole

Introduction

The Gestational Trophoblastic Disease (GTD) is an umbrella term for a group of pregnancy related disorders arising from abnormal placental trophoblast cells. It encompasses two pre-malignant conditions: partial and complete hydatidiform moles and the malignant Gestational Trophoblastic Neoplasias (GTN). GTNs are classified histologically into three distinct subgroups: choriocarcinoma destruens (invasive mole), choriocarcinoma (CC) and the very rare placental site trophoblastic tumor (PSTT). (1) GTD most always develops with or follows some form of pregnancy. Approximately 50% of cases follow a hydatidiform mole, 25% follow an abortion and 25% develop after an apparently normal pregnancy. (2) IM follows approximately 10-15% of complete hydatidiform moles. (3) IM is characterized by the persistence of edematous chorionic villi with trophoblastic proliferation invading into the myometrium. The presence of villi in the trophoblast differentiates an IM from CC. We describe a rare case of IM perforating through the uterus resulting in massive hemoperitoneum.

Case Report

A 38 years old married female P1A2 presented to the emergency services of SMGS Hospital, Jammu with complaints of pain lower abdomen and irregular bleeding per vaginum for 1 year. There was past history of medical

termination of pregnancy (MTP) at 8 weeks of gestational age done 1 year back. For last 1 month she was having continuous bleeding per vaginum. On examination, patient was conscious, cooperative and well oriented with mild pallor. Pulse and blood pressure were normal. Per abdomen examination revealed a lump corresponding to a gestational age of 22 weeks, firm to cystic in consistency and with well defined margins. On bimanual examination uterus was firm to cystic in feel and enlarged to 22 weeks of gestation. Bleeding per vaginum was mild. All investigations including complete haemogram, renal and liver function tests, X-ray chest and ECG were done which were normal. Ultrasound revealed enlarged uterus measuring 15.6 x 7.5 cms with multiple cystic areas within endometrium (snow storm appearance) and surrounding myometrium was not clearly defined suggesting the presence of molar tissue. Serum beta HCG levels were done which were high at a level of 5192 mIU/ml (0.1-5.1 mIU/ml). While awaiting laparotomy the patient developed severe abdominal pain which increased in intensity. On examination her abdomen was tender and on bimanual pelvic examination there was fullness and tenderness through all the fornices. On ultrasonography, haemoperitoneum was suspected and emergency laparotomy was performed. Abdomen was opened by mid-line vertical incision. Per-operatively the peritoneal

From the Department of Obstetrics and Gynecology & Pathology, Govt. Medical College, Jammu J&K India

Correspondence to : Dr Amandeep K Anand, Registrar Dept. of Obstetrics and Gynecology, GMC, Jammu, J&K-180016 -India



Fig 1. Cut Section of Uterus Revealing Multiple Grape Like Vesicles Invading the Endometrium & Myometrium

cavity was found full of blood and the uterus was soft and enlarged to a size of 22 weeks of pregnancy. A profusely bleeding growth was seen at the fundus of uterus and the perforated area resembled trophoblastic tissue. Decision for hysterectomy was taken. Total abdominal hysterectomy with preservation of left ovary was done. Cut section of uterus revealed multiple grape like vesicles invading the endometrium and myometrium (Fig 1). Histopathological examination of uterus showed invasive mole as there was a transmural infiltration of myometrium but there were no malignant changes. Her postoperative period was uneventful. The post-operative metastatic workup including serum biochemistry, chest X-Ray and upper abdominal ultrasonography did not reveal any evidence of metastasis. Postoperative serum beta HCG levels were high at a level of 2000 mIU/ml so the patient was given chemotherapy with injection Methotrexate and folinic acid for 2 cycles and her beta HCG levels gradually returned back to normal levels. She had no side effects of chemotherapy and adhered to the follow up schedule.

Discussion

GTN arises when the normal regulatory mechanisms controlling the proliferation and invasiveness of trophoblastic tissue are lost. These tumours are rare and constitute less than 1% of all gynecological malignancies. Originating in placental tissue, they are characterized by a distinct tumour marker (beta subunit of human chorionic gonadotrophin beta HCG) and have varying tendencies towards local invasion and distant metastasis. (4)

Invasive mole may perforate through the myometrium resulting in uterine perforation and intraperitoneal bleeding. (5) Direct vascular invasion and metastasis rarely occurs in invasive moles, the most common site reported is the lung. (6,7) The diagnosis of invasive mole rests on the demonstration of complete hydatidiform mole invading the myometrium or the presence of villi in the

metastatic lesion. Myometrial invasion is difficult to document on pelvic ultrasound and also in uterine curettings unless there is a sufficient myometrium to demonstrate the invasion. Demonstration of vascular mass without evidence of fetal material) on ultrasonography in the context of an elevated HCG is highly suggestive of GTN. Even in the presence of disseminated disease, most of the cases are amenable to treatment with almost 100% survival. With methotrexate complete remission is achieved in most non-metastatic and low risk cases. (8)

Although the development of effective Chemotherapy has resulted in improved survival of patients with GTT, hysterectomy remains an important adjunct in the treatment of the selected sub-set of patients. (9)

Intraabdominal hemorrhage and severe vaginal bleeding from GTN are serious life threatening complications requiring emergency hysterectomy in the majority of cases. Surgical therapy (hysterectomy), performed coincident with the institution of systemic chemotherapy has shown to significantly reduce the duration of hospitalization and the amounts of chemotherapy used to achieve remission, regardless of whether or not metastasis were present. (3)

References

1. Ngan HY, Bender H, Benedet JL, *et al.* FIGO Committee on Gynecologic Oncology. Gestational trophoblastic neoplasia, FIGO 2000 staging and classification. *Int J Gynaecol Obstet* 2003; 83 (Suppl 1), 175-77
2. Cunningham FG, Gant NF, Leveno KJ, *et al.* Diseases and abnormalities of the placenta. Title: William Obstetrics. 21st Edition. USA: McGraw-Hill; 2001. pp. 843
3. Hammond CB. Gestational trophoblastic neoplasms. In: Scott JR, DiSaia PJ, Spellacy WN (eds). Danforth's Obstetrics and Gynecology, 8th edn. Philadelphia: Lippincott Williams & Wilkins. 1999. pp.927-37
4. Moodley M, Tunkyi K, Moodley J. Gestational trophoblastic syndrome: An audit of 112 patients. A South African experience. *International J Gynecol Cancer* 2003 - ;13(2): 234-39
5. Mackenzie F, Mathers A, Kennedy J. Invasive hydatidiform mole presenting as an acute primary haemoperitoneum. *Br J Obstet Gynecol* 1993; 100: 953-54
6. Wilson RB, Hunter IS, Dockerty MB. Chorioadenoma Destruens. *Am J Obstet Gynecol* 1961; 81: 546-59
7. Ring AM. The concept of benign metastasizing hydatidiform moles. *Am J Clin Path* 1972; 58:111-17
8. Homesley HD. Single agent therapy for metastatic and low risk gestational trophoblastic disease. *J Reprod Med* 1998; 43: 6
9. Xiang Y, Yang X, Du J, Song H. The role of hysterectomy in the therapy of gestational trophoblastic tumor. *Chin Med Sci J* 2000; 15(1):45-48