**INTRODUCTION**

Invasive mole is a locally invasive gestational trophoblastic neoplasm. Hydatidiform moles are non-viable, genetically abnormal conceptions with excess expression of paternal genes and abnormal proliferation of placental trophoblast.1 Fifteen percent of the complete moles lead to uterine invasion, thus resulting in invasive mole. Invasive mole invades the myometrium with edematous villi and trophoblastic proliferation. The presence of villi in trophoblastic tissue differentiates invasive mole from choriocarcinoma.

Usual presentation of invasive mole is that of complete mole when there is continuous bleeding per vaginum or plateau or rise of ßhCG during follow-up. Presentation as haemoperitoneum, acute abdomen or shock is rare. Such presentations occur when rarely invasive mole perforates through uterine fundus leading to hemorrhage and collection of blood in peritoneal cavity.2 Diagnostic laparoscopy is not a recommended diagnostic tool for invasive mole but is recommended in acute gynaecological emergencies.3

The case is peculiar in its presentation and laparoscopy as the tool for its diagnosis.

**CASE REPORT**

A 30 years old para 3+2 presented in emergency with acute abdominal pain for 10 days, aggravated for 2 days and high grade fever for 4 days. She bled for 35 days after evacuation and then had no bleeding per vaginum. One day back, she had been to another university hospital where she was also evaluated. There was no documented fever in one day daycare admission there. Her investigations showed hemoglobin of 10.9 gm/dl, Total Leucocyte Count (TLC) 7.8/mm³ and normal levels of Urea, Creatinine and Electrolytes (UCE). Ultrasound pelvis showed normal uterus and ovaries, 4.7 cm x 2.4 cm x 5.5 cm (centimeter) collection in the cul de sac and increased pelvic vascularity. ßhCG investigation was sent. Patient left against medical advice from that hospital and presented to our hospital the next day.

On admission, she was oriented, not pale but tachycardic. BP was 110/70 mmHg (millimeters of mercury) and pulse was 121 beats/minute. Chest was clear on auscultation. Lower abdomen was tender. On bimanual examination, normal sized uterus was mobile with mild tenderness in the posterior fornix. ßhCG level was 2262 IU (international units). TVS (transvaginal scan) showed a complex mass lesion predominantly cystic in left adnexa. Uterus and right ovary were normal.

Clinical presentation, examination and investigations led to the most likely diagnosis of ectopic gestation which was either missed earlier at the time of evacuation or was a de novo conception. Laparoscopic surgery was planned and proceeded. On laparoscopy, hemoperitoneum was found to be about 400 ml. Uterus was enlarged with hemorrhagic lesions about 2 cm over fundus and smaller scattered lesions. Fresh blood was also seen oozing from those lesions. Pouch of Douglas contained a mass of old clotted blood. Diagnosis of invasive mole, uterine fundal rupture, leading to hemoperitoneum was made. The lesions being molar tissue were perforating and pouting through the uterine fundus. Procedure was converted to laparotomy. Laparoscopic findings were

**ABSTRACT**

A young multipara presented with acute abdominal pain. She had history of dilatation and evacuation for a missed miscarriage 2 months back. The diagnosis of ectopic pregnancy was made on the basis of clinical presentation and laboratory investigations. Laparoscopy was performed which revealed features of invasive mole. The procedure was converted to laparotomy and hysterectomy was performed. Patient recovered well. Histopathology confirmed the diagnosis of invasive mole. Follow-up till 12 weeks reported normal ßhCG (beta subunit of human Chorionic Gonadotropin) levels.

**Key Words:** Invasive mole. GTN. Acute abdomen. Hemoperitoneum. Laparoscopy.
confirmed. Hysterectomy was performed after informed consent. Ovaries were conserved. Gross specimen (Figure 1) showed molar invasion into the myometrium. Patient recovered uneventfully postoperatively. Histopathology revealed invasive mole (Figure 2). Postoperative βhCG was 1507.1 IU on 27 April. The βhCG levels gradually declined to 842 IU on 4 May and 67.75 IU on 18 May 2012. At 12 weeks it was 12 IU. The patient was categorized in the low risk group so she did not need chemotherapy.

**DISCUSSION**

Chong first reported the hydatidiform mole in the 6th century.⁴ It affects 1 - 3 in every 1000 pregnancies. This particular case had a unique presentation as the patient had presented post-evacuation and diagnosed as ectopic pregnancy on clinical grounds as well as on investigations. Similar presentation is reported by Anand et al.⁵ Ultrasound is the gold standard in the diagnosis of hydatidiform mole. For invasive mole, the diagnosis is based on analytic suspicion; a progressive increase in βhCG and by imaging; ultrasound scan with or without Doppler and/or uterine MRI.⁶ TVS Doppler is sometimes useful for diagnosis as well as for management modality choice.⁷ Ultrasound raises the suspicion of invasive mole when high velocity and low impedence flow mass is seen invading the myometrium. In this particular case, TVS did not give clue for invasive mole. Because of its atypical presentation it initially led to the misdiagnosis of ectopic gestation. Later, laparoscopy, which is not a standard or recommended diagnostic tool for invasive mole, led to correct diagnosis. However, Promecene et al. and Taylor et al. support this modality; for acute abdomen, even in gynaecology, laparoscopy is better than ultrasound and may lead to modification of an incorrect pre-operative diagnosis in upto 40% of cases.⁸,⁹

Invasive mole and choriocarcinoma which make up majority of GTN are highly responsive to chemotherapy with an overall cure rate exceeding 90% usually preserving reproductive function.¹⁰ Cases presenting as hemorrhagic crisis leave with limited intraoperative management options. Mitani et al. reported five such cases managed by partial resection of uterus; four of whom later got pregnant and delivered by Caesarean Section. Goldstien et al. reported similar experience along with internal iliac artery ligation. Similarly, literature review concludes that surgical management with hysterectomy has a place in selected subset of patients; those with intractable intra-abdominal hemorrhage or severe vaginal bleeding.⁵ This patient was one of these subsets.

Chemotherapy was not opted for this patient as there was no evidence of metastasis and beta-hCG levels were low. The levels gradually declined over 5 weeks. Pronounced degenerative changes in the trophoblast along with hyalinization were seen on histology; that correlated with low levels of βhCG.

**REFERENCES**


