



**AN UNUSUAL PRESENTATION OF CHORIO CARCINOMA PRESENTING WITH  
DIAGNOSTIC DILEMMA- A CASE REPORT AND REVIEW OF LITERATURE**

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**Abstract :**

Choriocarcinoma is the most malignant tumor of gestational trophoblastic neoplasia. The trophoblastic tumour presenting as spontaneous uterine perforation with hemoperitoneum is very rare. We present a 30 year old parous woman, who had completed her family and presented with acute abdomen caused by spontaneous rupture of uterus with internal hemorrhage due to choriocarcinoma following a live birth pregnancy. The long time interval between the previous live birth pregnancy and the acute onset of the disease by uterine rupture as the first symptom without any other symptoms are presented and discussed in this case report.

**Keyword :**Choriocarcinoma, hemoperitoneum, chemotherapy, gestational trophoblastic neoplasm

**INTRODUCTION:**

The term gestational trophoblastic disease describes the heterogeneous group of interrelated lesions that arise from abnormal proliferation of placental trophoblasts. It can be benign or malignant. A subset of malignant lesions that have varying propensities for local invasion and metastasis is referred to as gestational trophoblastic neoplasia (GTN). Locally invasive GTN develops in 15% of patients after evacuation of a complete mole and infrequently after other gestations and it can present with varied presentations.(1)

**CASE REPORT:**

A 30 yrs old female P2L2A1, housewife belonging to low socio economic class was referred to our hospital from private centre as a case of pain abdomen with ultrasound suggesting degenerated fibroid in uterine fundus. On admission the patient presented with acute lower abdominal pain; severe intermittent not relieved by

medication. There was no history of menstrual disturbances. Patient had loss of weight and loss of appetite. Her menstrual cycles were regular with moderate flow. She had two full term normal vaginal deliveries. Her second pregnancy was spontaneous abortion at 2 months amenorrhea; details of clinical finding or histopathology of aborted conceptus were not available. Puerperal sterilisation was done. Her past history was not significant with no relevant medical or past surgical history. There was no history of medication or drug allergy or history of contraceptive use. On examination she was thin built, moderately nourished and anaemic. She presented with tachycardia. Her blood pressure was 100/70 mm Hg. Her cardiovascular and respiratory systems on examination appeared normal. On abdominal examination, a mass arising from pelvis occupying the supra pubic region corresponding to uterine size of 14 weeks was palpable. It was firm, regular and freely mobile; there was no organomegaly or free fluid. Her external genitalia appeared normal. Per vaginal findings con-

x 4.8 in the right ovary. (Ultrasound done outside reported as degenerated fundal intramural fibroid with degeneration of 6 x 5.1 cm with right well defined clear ovarian cyst of 5.2 x



4.8 cm)

#### **hemoperitoneum at Laprotomy**

Since the patient presented with acute abdominal pain with tachycardia, anaemia and with evidence of free fluid in the ultrasound and her urine gravindex was positive,



firmed the same.

#### **Ultrasound showing Hypoechoic mass**

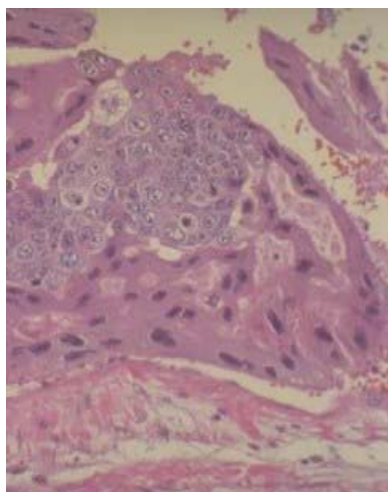
Her haemoglobin was 8.6 gms%. Her renal, thyroid and liver function test and coagulation profile were normal. Her blood group was O positive. Urine gravindex was positive. Ultrasound showed a hypo echoic mass of 5x5 cm in the uterine left cornual region with evidence of free fluid and there was a clear simple ovarian cyst of 5.2



ruptured ectopic was suspected and proceeded with emergency laparotomy with adequate blood. Intra operatively hemoperitoneum of 150 ml was present. A degenerated mass in the left cornual end of size 4 x 5 cm eroding the uterine myometrium is seen with

uterine perforation. Resection of mass was tried which ended up with torrential bleeding and the mass was infiltrating the whole myometrium, extending into the cavity with suspicious features of choriocarcinoma, hence we proceeded with total abdominal hysterectomy due to myometrial involvement as growth had invaded the uterine wall. Specimen was sent for histopathological examination and confirmed the diagnosis of choriocarcinoma. Post operatively 3 units of blood was transfused. Metastatic workup including serum bio chemistry, Chest X Ray, CT Abdomen, Pelvis, Brain were done and did not reveal any evidence of metastasis. Her beta HCG was 24,345 MIU/ml postoperatively. According to FIGO staging of choriocarcinoma, this patient was in stage 1 disease confined to uterus and according to WHO prognostic scoring system, this patient was in high risk category. Hence chemotherapy with EMA – CO regimen was started with medical oncologist opinion. The patient was given 12 cycles of chemotherapy. The patient recovered well with fall in beta HCG titres. The HCG titres came down to 0.4 MIU/ml in six and half months and another 2 cycles of chemotherapy were given after that and her blood investigations were normal and is in regular follow up.

#### **Post Chemotherapy Recovery Histopathology showing Choriocarcinoma**



**DISCUSSION:** We have described an unusual presentation of gestational trophoblastic neoplasm, GTN is extremely responsive to chemotherapy, even in its metastatic forms(2). Trophoblastic neoplasm may perforate the myometrium or erode into uterine vessels, causing intraperitoneal and vaginal bleeding respectively. Trophoblastic tumors are highly vascular and prone to severe hemorrhage, either spontaneously or during biopsy. Bulky necrotic tumour may involve uterine wall and serve as a nidus for infection, Patients with uterine sepsis may have purulent vaginal discharge and acute pelvic pain. After molar evacuation, persistent GTN may exhibit the histological features of either hydatidiform mole or choriocarcinoma. After a non molar pregnancy, persistent GTN always has the histological pattern of choriocarcinoma. Histologic characterization of choriocarcinoma depends on sheets of anaplastic syncytiotrophoblast and cytotrophoblast without chorionic villi (3). Approximately, almost half of all the choriocarcinomas are preceded by a molar pregnancy, whereas 25% follow an abortion or ectopic pregnancy and the remaining 25% follow term pregnancies [4]. Although the majority of choriocarcinomas develop shortly after the preceding gestation, in rare cases, choriocarcinoma can develop in women with a long interval between the diagnosis and the antecedent normal pregnancy as in our case study.[5]. Gestational trophoblastic neoplasia tend to be highly vascular and have a tendency toward central necrosis and hemorrhage, leading to uterine rupture due to myometrium invasion [6,7] and therefore surgical intervention may be necessary(8,9,10). Indeed uterine perforation due to rapid

tumor growth may cause intraperitoneal hemorrhage which would require immediate surgery (11). Hemoperitoneum due to active bleeding, is an emergency situation and requires immediate diagnosis and treatment to lower morbidity and mortality. Usually hemoperitoneum is caused by ectopic pregnancy, ruptured corpus luteum, or adnexal torsion [12]. Intraperitoneal haemorrhage following spontaneous perforation of uterus may simulate ectopic pregnancy as in our case (18). Acute bleeding from a uterine rupture due to a choriocarcinoma occurs very rarely and requires emergency laparotomy and management (13). A hysterectomy may be required in patients with metastatic GTN in order to control uterine hemorrhage or sepsis. Furthermore, in patients with extensive uterine tumors, a hysterectomy may substantially reduce the trophoblastic tumor and limit the need for multiple courses of chemotherapy (3). In this patient uterus was enlarged due to myometrial involvement and was misinterpreted as fibroid uterus by ultrasonogram. Myometrial invasion is difficult to document on pelvic ultrasound and also in uterine curettings unless there is a sufficient myometrium to demonstrate the invasion. Hysterectomy is indicated in this case and followed by chemotherapy. There is no need to remove ovaries as ovarian metastasis is rare and can be effectively treated by chemotherapy (14). Overall cure rate in recent years has been excellent with chemotherapy alone and surgery is undertaken only in selected cases. EMA – CO regimen is well tolerated and it is the preferred primary treatment in patients with metastasis and a high risk prognostic score (3). Choriocarcinoma has a very good prognosis even in advanced stages, since it is a very chemosensitive tumor type. Early recognition of Gestational Trophoblastic Neoplasm (GTN) will maximize the chances of cure with chemotherapy but some patients present with

many different symptoms months or even years after the causative pregnancy making diagnosis difficult. Choriocarcinoma presenting with such different pictures that its diagnosis may be delayed or missed entirely, depriving the patient of early treatment and the chance of a cure [15]. Irregular vaginal bleeding following abortion or hydatidiform has been reported to be the most common presenting symptom, however, spontaneous uterine perforation, as the initial presentation, is extremely rare [16]. In conclusion, Clinicians should be aware of the possibility of GTN in any reproductive age woman with bizarre presentation. Prognosis depends upon early diagnosis and management. High index of suspicion and continued vigilance is required for early detection and treatment in order to reduce the mortality due to choriocarcinoma. These patients should be managed by team of experts. It is important to individualize treatment for GTN based upon risk factor. Using less toxic therapy for low risk cases and aggressive multi-agent therapy for high risk cases, As choriocarcinoma usually affects poor women, provision of free medical care should be considered to save their lives.

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