Case Report

ACUTE HAEMOPERITONEUM: AN UNUSUAL PRESENTATION OF CHORIOCARCINOMA

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Abstract

Introduction: Choriocarcinoma is a highly malignant epithelial tumour arising from the trophoblastic tissue. It commonly occurs in women of reproductive age, rarely in post-menopausal women and in women under 20 years of age.

Methods: The case was initially diagnosed as an unusual presentation of choriocarcinoma with acute haemoperitoneum due to perforation of uterus with lung metastasis. The patient an 18 yr old woman came with acute abdominal pain and signs of haemoperitoneum. Emergency laparotomy followed by hysterectomy was done. Subsequently patient took chemotherapy and improved.

Conclusion: Acute haemoperitoneum is a medical emergency. So this case report emphasizes the need of sophisticated diagnostic technology for early diagnosis and successful management of the patient. Clinician should give more attention to unusal presentation of choriocarcinoma.

Key-Words: Choriocarcinoma, Uterine perforation, Haemoperitoneum, β-hCG.

Introduction

Gestational trophoblastic neoplasms are characterized by abnormal proliferation of the trophoblastic tissue. They fall into the three categories of benign hydatidiform mole, invasive mole and highly malignant choriocarcinoma.

Choriocarcinoma is a rare but highly malignant tumour, the most aggressive form of gestational trophoblastic disease[1]. It is commonly associated with pregnancy but may develop after a normal pregnancy. It is usually associated with molar pregnancy, ectopic pregnancy, miscarriage or abortion[2,3]. Common symptoms include prolonged vaginal bleeding, ovarian cyst and uneven swelling of the uterus[4]. In most cases choriocarcinoma is associated with a positive pregnancy test even without pregnancy and with high levels of the beta Human Chorionic Gonadotrophin hormone (β-hCG). However choriocarcinoma presenting as spontaneous uterine perforation with intra-abdominal hemorrhage is extremely rare[5]. In this report we described a case of choriocarcinoma with uterine perforation resulting in a massive haemoperitoneum.

Case report

An 18 years old woman from Comilla reported to the emergency services of Ibn sina hospital, Dhanmondi, Dhaka with the complaints of abdominal distension,respiratory distress for 24 hours along with per vaginal bleeding . She was married for 8 months. She had no history of amenorrhoea but her menstrual cycle was irregular for last 6-7 months. On examination she was found to be severly pale, afebrile with pulse rate of 120 /min and BP 90/60 mmHg. Abdomen was hugely distended, tender with absence of bowel sounds. On bimanual examination the uterus was found to be soft and about 8-10 weeks size, all the fornices were

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full and tenderness could be elicited through all fornices. Urine test for pregnancy was done and found positive. Immediately TVS was done which revealed bulky uterus with a left adnexal mass adherent with the uterus having free fluid within the utero and in the peritoneum suggestive of ruptured ectopic pregnancy. Haematological investigations revealed hemoglobin of 4.2 gm%; packed cell volume of 13%, total leukocyte count of 6000/cmm and platelet count of 165,000/cmm. Blood was sent for serum β-hCG test.

Following resuscitative measures she was taken for an emergency laparotomy with a provisional diagnosis of a ruputured ectopic pregnancy. Abdomen was opened and about 2 litres of blood from the haemoperitoneum was evacuated. There was profuse haemorrhage from perforation in the right lateral wall of the uterus and the perforation extended from fundus upto cervix.

The uterus was soft and enlarged to a size of 10 weeks of pregnancy and the perforated area resembled trophoblastic tissue. Bilateral ovaries and salpinges were found to be normal. At first, efforts were taken to conserve the uterus by suturing the wall of perforation. But as the uterus was fragile and bleeding was not secured and moreover patient's condition was deteriorating so decision was taken for hysterectomy. A total abdominal hysterectomy was performed.

Intraoperatively patient received 3 units of packed cell transfusion. After operation patient was shifted to ICU and given another 2 units of blood. Serum β-hCG on the day of admission was 202601.96 IU/ml. Tissue sent for histopatological examination and the pathological diagnosis was of choriocarcinoma.

Microscopic findings of sectioned tissue from uterine wall revealed presence of anaplastic trophoblastic cells within the myometrium. Some of these were present within the blood vessels. So pathological diagnosis of retained products of conception with atypical trophoblastic cells favouring choriocarcinoma was made (Fig-1).

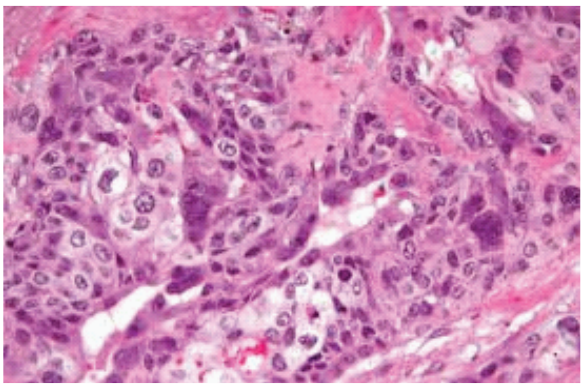

Fig-1: Microscopic view of choriocarcinoma.

Post operatively various laboratory investigations were done including serum β-hCG, chest X-ray and upper abdominal ultrasonogram (USG) etc. Among these all parameters were found to be normal except chest X-ray which revealed metastatic lesion in the lung. Post operative period was uneventful. Patient was discharged on tenth day. During discharge her serum β-hCG level was 350 IU/ml. As the patient was diagnosed as a case of choriocarcinoma with lung metastasis, so she was referred to a medical oncologist for chemotherapy. She was given chemotherapy and prognosis was observed to be good. From ethical point of view consent has been taken from the patient to publish her information.

Discussion

Gestational choriocarcinoma arising from placental trophoblastic tissue is a malignant germ cell tumor that can be associated with any type of gestational event, most often a complete hydatidiform mole[6]. Early metastasis to distant sites, especially to the lungs, liver and brain is quite common. Its incidence varies with figures as high as 1 in 120 pregnancies in some areas of Asia and South America, compared to 1 in 1200 in United states. The incidence of choriocarcinoma after complete hydatidiform mole is about 1000 times greater than after a normal pregnancy[7]. It may occur possibly ab in vitro[8]. Choriocarcinoma is a rare tumor. In western countries, the incidence is 1 in 45000 pregnancies[9]. Higher incidence is reported from Africa, Asia and South America. Majority of cases occur in women aged less than 35 years of age[9].

The exact cause of choriocarcinoma is unknown. Women with low level of dietary proteins are at high risk of developing molar pregnancies which predispose to choriocarcinoma[10]. Hence choriocarcinoma is relatively more common in low income countries where most people have a poor nutritional status and where general medical check up are not routinely conducted[11]. Choriocarcinoma is suspected when there is persistent or irregular uterine haemorrhage, following abortion or hydatidiform mole. Rapid growth and hemorrhage make the tumour a medical emergency.

Being a relatively uncommon cancer presenting with a wide range of non specific symptoms, choriocarcinoma is difficult to diagnose clinically. Choriocarcinoma is rarely considered in differential diagnosis of the conditions likely to have similar clinical presentation. In addition to other clinical manifestations, elevated levels of β-hCG are commonly useful for the diagnosis of choriocarcinoma and this hormone can also be used as a prognostic marker. So far only few cases were described with normal levels of β-hCG[12].

Some of the observations in the current patient such as irregular cycles ,absence of amenorrhoea and vaginal bleeding had been previously described. This suggests that it is extremely important to consider the possibility of choriocarcinima even when only a few of these nonspecific symptoms are observed. From this perspective it seems important that during clinical examination and laboratory investigations, all possible conditions should be taken into account so as to allow an early diagnosis. Early diagnosis is extremely important for the successful management of this condition and most patients have been reported to recover with chemotherapy[13]. While surgical management was indicated in only few cases, chemotherapy is highly effective for all forms of gestational trophoblastic diaease[14]. For stage 1 disease hysterectomy and single agent chemotherapy is effective. For advanced diseases salvage regimens are available for management. Therapy for patients with nonmetastatic malignant trophoblastic disease includes (a) single agent chemotherapy and (b) combined chemotherapy and hysterectomy. In present case prognosis was good after taking chemotherapy.

Conclusion

The current case report emphasizes the need for health care professionals to consider rare causes of haemoperitoneum. Though the invasive mole usually presents with perforation and haemoperitoneum, choriocarcinoma may present with same features. Since it is a rare event, treating physicians should remain more cautious for prompt diagnosis of underlying pathology as well as timely management of the patient.

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