



CASE REPORT

Molar Changes in Ectopic Gestation: An Unexpected Diagnostic Surprise

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Abstract

Ectopic molar gestation occurs very rarely and so far only 132 cases have been reported in the previous literatures. Hereby we present a case report of right sided tubal ectopic with molar changes. In this case report we have emphasised on the need for thorough histopathological examination for reaching the diagnosis and the need of follow up of such patients by the clinicians. A 34-year-old gravida 5, para 1, pregnant woman with a 5 weeks + 2 days history of amenorrhea presented to the Emergency with the chief complaints of pain abdomen with nausea and vomiting. Per vaginal examination revealed cervical motion tenderness. However, there was no bleeding per vaginum. Emergency laparotomy, was done which showed a ruptured right tubal ectopic pregnancy and histopathological examination was suggestive of a molar pregnancy. Molar gestation is considered a rare entity but it can occur at any site of an ectopic gestation. Although its difficult to establish the diagnosis clinically but histopathology has an important role to play to make a conclusive diagnosis.

Key Words

Ectopic, Molar, Pregnancy, Hydatidiform

Introduction

The incidence of molar pregnancy varies from approximately 1 in 500 to 1 in 1000 pregnancies while ectopic gestation occurs more commonly, the incidence being 4.5-16.8 for every 1000 pregnancies^[1]. The most common site of molar gestation is uterus but these changes can also occur in sites of ectopic pregnancy. The treatment is surgical i.e. salpingotomy and patient should be counselled as well as followed up by serial serum human chorionic gonadotropin (hCG) estimation.

It is often the abnormal process of fertilisation that leads to molar gestation. Hydatidiform moles are either partial or complete which can be distinguished on the basis of clinical presentation, chromosomal pattern and

histopathological evaluation. In case of complete mole there is fertilisation of an empty ovum by a haploid sperm which later undergoes division, forming pattern as 46, XX with paternal genome origin. However, in partial moles, it is the fertilisation of haploid ovum by two haploid spermatozoa or one diploid spermatozoon forming a triploid genome. (69 XXX, 69 XXY or 69 XYY)^[2]. It is possible for partial Hydatidiform Mole to be associated with a fetus, and in exceptional cases, this association can even enable the detection of fetal heart activity. As the incidence is very rare, it's very difficult to diagnose, although ultrasonography helps to clinch the diagnosis.

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Even though ectopic pregnancy and molar pregnancy are both rather common occurrences, the combination of the two, known as an ectopic Hydatidiform Mole, is a very uncommon occurrence. Very few cases of molar ectopic pregnancies have been reported in the previous literatures. We hereby report a case to stress on the fact that histopathological examination is very essential and follow up should be done in all cases of ectopic pregnancy.

Case Report

A 34 years old woman with Obstetric score G₅P₁L₁A₂E₁ with period of gestation 5 weeks + 2 days presented with chief complaints of pain abdomen with nausea and vomiting. Urine Pregnancy test was faintly positive. Patient was a known case of hypertension and was prescribed an anti-hypertensive drug by a private practitioner. This resulted in a sudden drop in blood pressure which motivated her to report to the emergency. Her past obstetric history revealed that she had undergone two abortions and left sided salpingectomy for an ectopic pregnancy as well. Per abdominal examination revealed tenderness in right iliac fossa and presence of transverse scar as well. Per vaginal examination revealed cervical motion tenderness on right side. There was no bleeding per vaginum. Ultrasonography of pelvis showed a large heterogeneously hypo to hyperechoic complex solid cystic lesion in right adnexa with internal vascularity measuring 6.2x6x5.9 cm. (Fig.1) Also features suggestive of hemoperitoneum and thereby ruptured ectopic were also visualised. Routine hematological and biochemical examinations were within normal limits.

Emergency laparotomy was performed, intraoperatively there was a tubal mass at isthmus of right

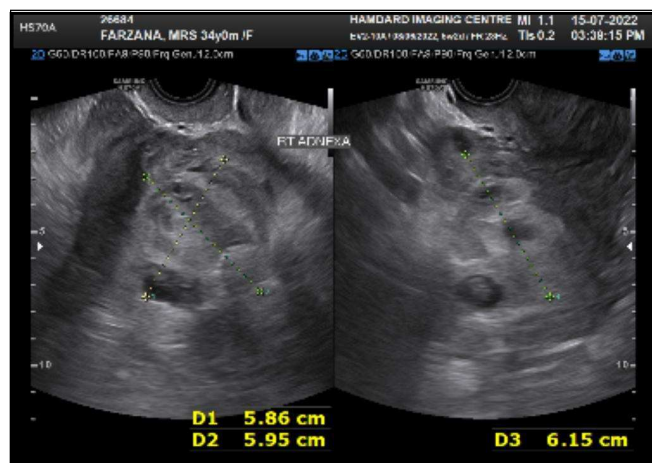


Fig 1: Ultrasonography showing right ruptured ectopic with hemoperitoneum



Fig 2: A Gross picture showing tubal mass along with presence of grape like vesicles B Microscopic picture showing tubal lining epithelium along with hydropic villi. (H&E,40X)

fallopian tube with moderate amount of hemoperitoneum. Bilateral ovaries were normal and uterus was normal in size. Right salpingectomy was done and excised tubal mass was sent for histopathological examination. (Fig 2A) Gross examination showed grey brown tissue, measuring 5x3x2 cm with moles ranging in size from 1 to 3 mm. On microscopy it revealed numerous hydropic chorionic villi. Villi showed trophoblastic proliferation with scalloping of borders. (Fig 2B) Based on the above findings a diagnosis of Right tubal ectopic gestation with features of partial hydatidiform mole was made. On day of surgery, total serum β -hCG was 10.40 mIU/ml. Post-operative period was otherwise uneventful, but she was followed up by weekly serum β -hCG measurements which showed a decreasing trend.

Discussion

The patient in our case was at risk of recurrent ectopic pregnancy with past history of another ectopic gestation. Tubal ectopic hydatidiform moles are quite rare lesions, and 132 cases have been reported in the world literature^[1]. Clinically tubal molar pregnancies are usually indistinguishable from non-molar ectopic pregnancies. To identify or exclude molar transformation in all surgically removed ectopic pregnancies, histological investigation is required. Molar pregnancy should be recognized from non-molar pregnancy since the former can result in a chronic trophoblastic disease or even distant organ metastases. Hence close follow-up is essential after the removal of products. In challenging circumstances, DNA flow cytometry for ploidy analysis and P57 immunocytochemical labelling are beneficial for distinguishing between partial and complete moles. The primary method for treating ectopic pregnancy instances



is laparoscopy. The most common surgical procedure for patients should be a salpingotomy in the absence of rupture. The diagnosis in our situation was a ruptured tube, hence the salpingectomy was the preferred course of action.

Ectopic gestation with features of choriocarcinoma occurs very rarely, incidence being one in 5033 tubal pregnancies. The prognosis of choriocarcinoma occurring in tubal gestation is found to be better than those occurring inside uterus because in cases of tubal molar pregnancy, the tube is removed and not left intact, as in the uterus^[3].

Patients usually present with complaints of abdominal pain and vaginal bleeding. In females who present themselves as a suspected case of ectopic pregnancy should be investigated properly to rule out the possibility of an ectopic molar pregnancy. Treatment of molar ectopic gestation is surgical salpingotomy, preferably laparoscopically and follow-up by serial serum β -hCG estimation^[4]. Monitoring β -hCG titers following surgical management of suspected ectopic pregnancies is crucial. It helps diagnose persistent ectopic gestation and also aids in ruling out malignant changes in trophoblastic diseases. However, relying solely on β -hCG titers may not suffice due to similar increases seen in both tubal ectopic and molar pregnancies, possibly due to inadequate vascularization in tubal pregnancies. Recent studies have highlighted this challenge, indicating the need for additional

diagnostic methods for accurate differentiation^[4]. Although ultrasonography is useful in the diagnosis of uterine molar pregnancies, there is a chance of missing this diagnosis in cases of an ectopic molar pregnancy. Histopathology should be used as a gold standard to make a diagnosis, and DNA flow cytometry should be used to supplement that diagnosis. Thus, histopathological examination of the conception products remains the gold standard for the diagnosis.

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