

A Rare Case of Large Hydatidiform Mole Mimicking a Term Pregnancy

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ABSTRACT

Molar pregnancy is a type of abnormal pregnancy that usually presents with amenorrhea, vaginal bleeding and elevated serum β -hCG levels. We report a rare case of complete hydatidiform mole occurring in a 46-year-old P2L2 lady who presented with a term size uterus and elevated serum β -hCG level ($> 15,00,000$ per deciliter, anemia (hemoglobin: 8.1 g/dL), difficulty in breathing and minimal vaginal bleeding. During the course of her evaluation, she had profuse vaginal bleeding, she underwent suction and evacuation, but bleeding was not controlled despite measures to control it. She was given uterotonics and antifibrinolytic agents and uterine artery ligation. But was proceeded with emergency hysterectomy for uncontrolled hemorrhage. The content of suction and evacuation was vesicles with blood clots and histopathology was reported as complete hydatidiform mole. The patient received a total of 4 units of packed red blood cells. She was discharged from hospital on 5th postoperative day and was followed up serial serum β -hCG level. Therefore, complete mole can present with enlarged uterus, vaginal bleeding and anemia. It is also important to note that intractable bleeding following suction and evacuation not being controlled with uterotonics and antifibrinolytic agents and uterine artery ligation may require hysterectomy to save the patient's life.

KEY WORDS

Elevated serum β -hCG level, Suction and evacuation, Term size uterus, Vaginal bleeding

INTRODUCTION

Molar pregnancy are forms of gestational trophoblastic disease (GTD) that involves abnormal villous formation. Histologically, they are characterized by aberrant changes within the placenta. The chorionic villi show edema of the villous stroma and varying degrees of trophoblastic proliferation and marked villous scalloping.¹ Hydatidiform moles are categorized as either complete hydatidiform moles or partial hydatidiform moles based on presence of fetal parts and genetics.¹ Hydatidiform moles are typically diploid, but occasionally tetraploid, whereas partial hydatidiform moles are triploid conceptuses with the extra haploid set of chromosomes being paternally derived. Hydatidiform moles typically present clinically with vaginal bleeding, amenorrhea, abdominal mass and elevated serum β -hCG levels.² The incidence of molar pregnancy is higher in women younger than 20 years and older than 40 years of age. It is also higher in nulliparous women, in patients of low economic status, and in women whose diets are deficient in protein, folic acid, and carotene.³ Previous history of molar

pregnancy is also considered as a risk factor.¹ The diagnosis of molar pregnancy is by histopathologic examination of the products of conception. Hydatidiform mole is the premalignant form of gestational trophoblastic neoplasia. It is of clinical and epidemiological interest because of its potential for significant consequences for women's health and future pregnancy.⁴ Amongst the two forms of molar disease, complete hydatidiform mole have high propensity for persistence (requiring clinical intervention) or progress to choriocarcinoma.

CASE REPORT

A 46-year-old woman presented to the Department of Obstetrics and Gynecology with abdominal distention that developed over the course of 8 months. She had abdominal discomfort and gradual distention of abdomen for the same duration. She had irregular bleeding per vaginum, for past 8 months, but it was much less in amount compared to

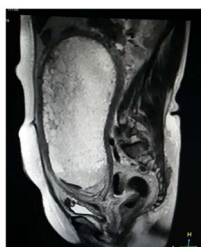


Figure 1. RI of the abdomen and pelvis showing heterogeneously enhancing, heterointense content

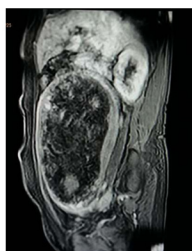


Figure 2. MRI of Abdomen and Pelvis showing predominantly cystic component in the endometrial canal with well-maintained definition of myometrium.



Figure 3. Content was vesicles with blood clots obtained after Suction and Evacuation

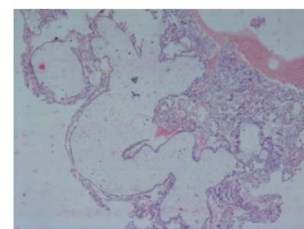


Figure 4. Histopathology slide reported as molar pregnancy

her regular menstrual cycles. She had abdominal pain for past 21 days and it was severe for past 7 days. Abdominal examination revealed enlarged uterus corresponding to term size gravid uterus. Laboratory studies showed a Hemoglobin level of 8.1 grams per deciliter (normal range was 12-15 grams per deciliter). Beta HCG level was > 15,00,000 per deciliter (normal value is < 5 per deciliter), liver function test showed gamma GT level of 144 units per liter normal range is 9-48 units per liter. Ultrasonography of abdomen showed uniformly enlarged uterus filled with multiple cystic structure suggestive of molar pregnancy. MRI of the abdomen and pelvis showed heterogeneously enhancing, heterointense content, predominantly cystic component in the endometrial canal with well-maintained definition of myometrium (fig. 1 and 2), likely complete mole. Chest X-ray was done to see for metastasis as this was a huge hydatidiform mole and incidence of metastasis is higher. While in the hospital patient had bleeding per vaginum. She underwent suction and evacuation and the content was vesicles with blood clots (fig. 3) during evacuation she had excessive bleeding which was not controlled by uterotonics and uterine artery ligation hence, hysterectomy was performed and histopathology was reported as molar pregnancy (fig. 4).

DISCUSSION

Molar pregnancy is common in Asian population, the prevalence is 5 to 15 fold higher in East Asian countries like Thailand and Japan. Incidence of molar pregnancy in Nepal ranges from 2.1-5.1 per 1000 live births, however huge molar pregnancy continuing for 8 months is a rare entity.⁵ In Europe and North and South America, hydatidiform moles are observed in approximately 1 in 1,000 pregnancies.⁶ The karyotype study of a complete mole is usually 46, XX; the chromosomes are completely derived from paternal side, as a complete mole results due to fertilization of empty ovum by a haploid sperm that duplicates its own chromosomes after meiosis.^{7,8} Classical clinical signs of hydatidiform mole are vaginal bleeding, increase in the size of the uterus than the period of gestation, hyperemesis gravidarum, high level of β -hCG for gestational age and cystic enlargement of the ovaries.⁹ The use of ultrasonography in early pregnancy

and β -hCG assays have led to earlier diagnosis of molar pregnancy.^{10,11} A study in China between 1989 and 2006 showed that vaginal bleeding remained the most common presenting symptom (83.2%) followed by excessive uterine size (46%).¹⁰ Our patient presented with a 34-week size uterus with occasional bleeding per vaginum. It is important to note that the patient had, in addition to the enlarged uterus, abdominal discomfort and anemia. This can be explained by the accumulation of blood inside the uterine cavity causing the uterus to enlarge and leading to the abrupt onset of heavy vaginal bleeding while she was in the hospital. Therefore, anemia in similar cases of molar pregnancy should be cautiously interpreted, as heavy vaginal bleeding will likely occur spontaneously or during the evacuation procedure, which might sometimes require hysterectomy like in our patient when bleeding could not be controlled with medications and uterine artery ligation. Complete molar pregnancies are often diagnosed by ultrasound especially with the presence of cystic changes in the placental tissue.¹¹ The definitive diagnosis is made by the histologic evaluation of the evacuated tissues.

Patients with complete mole usually have elevated β -hCG reaching greater than 100,000 mIU/L³. It is interesting to note that our patient initially had a very high β -hCG level and it was > 15,00,000 per deciliter whereas normal value is < 5 per deciliter. The extremely elevated β -hCG levels, usually above 500,000 mIU/L, can saturate both the immobilized capture antibodies and the free tracer antibodies. Thus, it can prevent the sandwich formation necessary for a positive test result, thus giving a falsely negative urine pregnancy test which was seen in our patient who had a negative urine pregnancy test.¹² Dilution of the sample to reduce the amount of β -hCG tested is advised to overcome this limitation. The preferred treatment for molar pregnancy is suction and evacuation, followed by intravenous oxytocin to decrease the risk of uterine atony.² However, in a meta-analysis by Zhao et al., hysterectomy was preferred in patients who are at least 40 years old and in whom future fertility was not an issue. It was done to prevent post molar gestational trophoblastic neoplasia.¹³ It is an important sequelae of molar pregnancy, which develops in 6-32% of complete moles. Therefore, it is recommended to monitor serum β -hCG levels every

1-2 weeks until reaching undetectable values, after which monthly measurements are required for an additional 6 months.² In our patient we had to perform hysterectomy for bleeding not responding to medical management and uterine artery ligation

In conclusion, complete molar pregnancy can present with an enlarged uterus with anemia with minimal vaginal

bleeding owing to the accumulation of blood in the uterine cavity. A low serum β -hCG level or negative urine pregnancy test in the setting of suspected complete mole should prompt repeating the measurement on diluted sample. Hysterectomy may be needed when there is excessive bleeding during suction and evacuation, which does not respond to medical management and uterine artery ligation.

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