

A Case Report on Complete Molar Pregnancy in a 20-Year Primigravida**Vishwa Tushar Patel¹, Henna Tushar Patel², Hitanshi Nareshkumar Panchal³, Shilpa Samayam⁴**¹Senior Resident, Department of Obstetrics and Gynecology, GMERS, Gotri²Intern, Department of Obstetrics and Gynecology, GMERS, Gotri³Intern, Department of Obstetrics and Gynecology, GMERS, Gotri⁴Intern, Department of Obstetrics and Gynecology, Government Medical College, Siddipet

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Abstract:**Objective:** Gestational Trophoblastic Disease (GTD) is a rare tumor originating from the placenta's trophoblasts. It is a rare condition, seen complicating pregnancy, one of which is Hydatiform Mole or Molar Pregnancy.**Case:** A 20-year-old female, primigravida, presented with 4 months of amenorrhea with complaints of abdominal pain and spotting per vaginum for 1 month. On examination, she showed severe pallor with tachycardia and hypotension. On per abdomen examination, the uterus was palpable up to the level of the umbilicus, along with spotting on per speculum examination. Ultrasonography was suggestive of, complete molar pregnancy, with a snowstorm appearance of mixed echogenicities within the uterine cavity. Her Urine Pregnancy Test was positive with a BhCG level, of more than 150000. Her complete blood count was suggestive of Hemoglobin - 5.8 gm/dL, WBC - 8700 per cubic mm and Platelets - 386000. Her total bilirubin was 1.3 mg/dL. Chest X-ray was clear. Serum TSH was < 0.01. The patient was taken for Suction and Evacuation under Total Intravenous Anesthesia (TIVA). She was monitored carefully in the post-operative period and discharged on full recovery.**Discussion:** Molar pregnancy is an extensively studied condition and has been found to be associated with patients with a previous history of molar pregnancy or advanced maternal age. Typical symptoms of molar pregnancy should alert the medical personnel even in low-risk patients.**Conclusion:** The general understanding of the natural history and management of molar pregnancy has advanced considerably in recent years. The key role in obtaining a high cure rate becomes an early diagnosis and the subsequent vigilant follow-up.**Keywords:** Molar Pregnancy, Hydatiform Mole.This is an Open Access article that uses a funding model which does not charge readers or their institutions for access and distributed under the terms of the Creative Commons Attribution License (<http://creativecommons.org/licenses/by/4.0>) and the Budapest Open Access Initiative (<http://www.budapestopenaccessinitiative.org/read>), which permit unrestricted use, distribution, and reproduction in any medium, provided original work is properly credited.**Introduction**

Molar pregnancies, a premalignant form of gestational trophoblastic neoplasia, are characterized by an overgrowth of fetal chorionic tissue within the uterus [1]. The incidence of molar pregnancies was estimated to be 1 in 160 pregnancies in countries like India and the Middle East [2].

Hydatidiform mole (HM) is characterized by the placental villi's hydropic swelling, the villous trophoblast's hyperplasia, and absent or abnormal fetal development. A molar pregnancy can present as a complete or partial molar pregnancy. Complete hydatidiform moles usually occur due to fertilizing an empty egg with no nuclear material and a sperm having a haploid set of chromosomes. The paternally derived single set of chromosomes duplicates, producing a homozygous molar [3].

Occasionally, the empty egg can be fertilized by two separate sperms, resulting in heterozygous chromosomes [4]. In a partial molar pregnancy, the mole has 3 sets of chromosomes – 1 maternally derived and 2 paternally derived chromosome sets, resulting in triploidy [5].

Women at risk of molar pregnancy, mainly complete hydatidiform mole, are those at the extremes of the reproductive age: girls <15 years and women >45 years [6] and who have had a history of molar pregnancy or are multigravida.

So, the occurrence of molar pregnancy in patients with no prior conception is rare.

Case Report

A 20-year-old patient, married for two years, primigravida, with history of no prior conception, presented with four months of amenorrhea. She also complained of lower abdominal pain with irregular vaginal bleeding in the last one month. On examination, the patient had tachycardia, hypotension and severe pallor. Her per abdomen examination revealed uterus palpable up to the level of umbilicus, suggesting a comparison to a 24 weeks size pregnant uterus. However, fetal parts could not be palpated nor could fetal heart sounds be auscultated. On Per speculum examination, minimal bleeding was present and os appeared closed.

The preliminary test done was the urine pregnancy test and it turned out to be positive. Following which, two large bore IV cannula were inserted in both hands and blood was sent for the following investigations – Complete blood count, beta hCG, Thyroid function test, coagulation profile, renal function test (RFT), liver function test (LFT) and cross matching.

She was started on IV fluids while blood products arrived.

Bed side ultrasonography was done and it showed mixed echogenicity's within the uterine cavity, giving a classic snowstorm appearance – suggesting complete hydatiform mole (Figure 1). Patient and her relatives were counselled regarding

the rare occurrence of molar pregnancy and suggested to undergo Dilatation and Evacuation. Her reports were as follows - Hemoglobin - 5.8 gm/dL, WBC - 8700 per cubic mm and Platelets – 386000; Bilirubin – 1.3 mg/dl; TSH <0.01 mIU/L; RFT, LFT and coagulation profile – within normal range. Her beta hCG was 150,000 mIU/mL.

Patient was taken into the operation theatre with one Packed Cell Volume (PCV) for Suction and evacuation under Total Intravenous Anesthesia (TIVA). All the intrauterine products of conception removed were preserved in normal saline and sent for Histopathology Examination (Figure 2 and 3). After ensuring complete removal of products, patient was given Oxytocin to ensure uterine contractility. Patient was then shifted to the ICU and her vitals were closely monitored and a watch for bleeding per vaginum was kept. She was given two more units of PCV. After 48 hours, patients' blood reports were sent again and they showed – Hemoglobin – 9 mg/dl, WBC - 6300 per cubic mm and Platelets – 278000; beta hCG – 13,678 mIU/mL (decrease by more than 50%). She was vitally stable with no active bleeding. Her ultrasonography was suggestive of an empty uterine cavity. She was discharged and asked to come for follow up on Day 7 with repeat beta hCG and every week thereafter till hCG levels became null.



Figure 1: "Snow storm" appearance on ultrasound

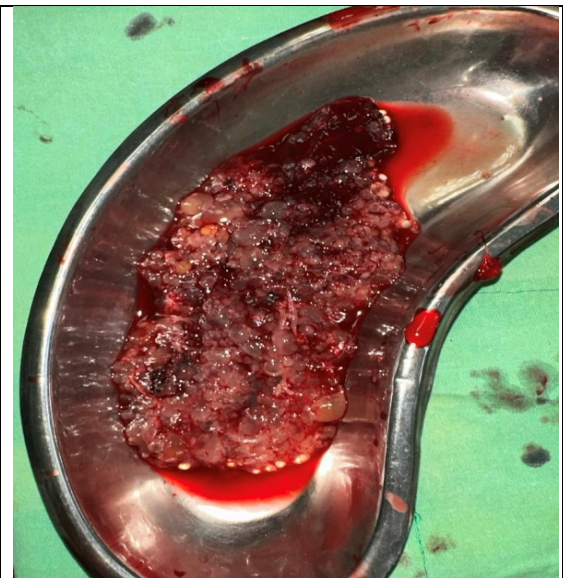


Figure 1: Gross appearance of vesicular moles



Figure 3: Gross appearance of vesicular moles

Discussion

Hydatiform mole is an uncommon complication of early pregnancy. It includes complete and partial variants under the wide heading of Gestational Trophoblastic Diseases (GTD). Maternal age less than 15 and more than 40 years, has accounted for a greater risk for the occurrence of molar pregnancy. Still, most molar pregnancies are seen in the reproductive age group of 20 to 40 years [7,8]. History of prior molar pregnancy is another important risk factor for both types of molar pregnancy, as repeat molar pregnancy is seen in 0.6 to 2.6% of the cases. Other potential risk factors include oral contraceptive use, maternal type A or AB blood groups, maternal smoking, and maternal alcohol abuse. [7,9] Molar pregnancy typically presents in the first trimester. It presents with a multitude of signs and symptoms which includes vaginal bleeding, uterine size larger than expected according to pregnancy date, excessive beta-human chorionic gonadotropin (β -hCG) levels, anemia, hyperemesis gravis, theca lutein cysts, pre-eclampsia, and respiratory distress [10,11,12]. β -hCG is a glycoprotein hormone structurally similar to thyroid-stimulating hormone, and for this reason, many patients will present with clinical hyperthyroidism [14]. Over the years, there has been a drastic reduction in the number of patients presenting with the classical triad of molar pregnancy i.e. amenorrhea, irregular vaginal bleeding, and uterine size more than the gestational age [14,15,16]. This could be due to early detection by transvaginal ultrasound and advanced laboratory tests. This case is particularly interesting due to its late presentation at 4 months of amenorrhea.

Conclusion

Molar pregnancy should always be kept as a differential when a patient presents with bleeding during first trimester, irrespective of the associated symptoms. Early diagnosis and management will help prevent morbidity and mortality.

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