



ORIGINAL RESEARCH PAPER

Obstetrics & Gynaecology

A CASE REPORT ON COMPLETE MOLAR PREGNANCY

KEY WORDS: Molar Pregnancy, Beta-hcg, grapelike

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ABSTRACT

Molar pregnancy results from abnormal fertilization, leading to the formation of atypical trophoblastic tissue within the uterus. It is broadly classified into complete and partial moles, with the incidence of complete molar pregnancy estimated at approximately 0.13 % to 0.4% pregnancies. A complete mole is characterized by the absence of an embryo, while a partial mole may contain fetal parts. As molar pregnancies do not result in viable fetuses, early diagnosis and treatment are crucial to ensure a favorable outcome. In this case, diagnosis was established through clinical evaluation, serial serum beta-hcg monitoring, and transvaginal ultrasonography along with confirmation by histopathology examination. The most commonly observed complications included excessive vaginal bleeding and signs of hyperthyroidism. Early antenatal registration and routine first-trimester ultrasonography have played a vital role in improving the timely detection of molar pregnancies, enabling prompt management and reducing the risk of serious complications.

INTRODUCTION -

Molar pregnancy has an incidence rate of 1.35 to 4 per 1000 deliveries in current Indian scenario. Molar pregnancy comprises two distinct entities, partial and complete mole, which can be distinguished by means of gross morphologic, histopathological examination and according to chromosomal pattern. Complete moles have no identifiable embryonic or fetal tissues. Classically, the chorionic villi have diffuse trophoblastic hyperplasia and generalized swelling, and trophoblast at the implantation site has diffuse, marked atypia. Complete moles usually have a 46,XX karyotype, and are derived completely from father.

This case report on Molar pregnancy emphasizes on clinical presentation along with diagnosis using beta Hcg and sonography findings. Report also highlights on the treatment modality and outcome of the pregnancy.

Case Report - 31-year-old G2P1L1 previous LSCS 4 years back (ivo of PIH) presents at 10 weeks of gestation with vaginal bleeding, along with abdominal cramp and nausea. Patients past medical and family history were unremarkable. The patient was alert, oriented and had tachycardia at the time of admission, rest of the vitals were within normal limits. On physical examination fundal height was 4 cm below umbilicus. Abdomen was soft and mildly tender on lower quadrants.

Pelvic examination reported discharge of blood clots and brown-colored grapelike material. The cervical OS was dilated to approximately 2cm. Lab results comprised of hemoglobin of 8.6 g/dL, TLC 13,000/cumm, platelets at 1,53,000/cumm, INR of 1.5 and TSH of 0.011 whereas lft and rft were normal. Beta HCG was 461,636 mIU/mL. Pelvic-sonogram reviled a cloud like image, with absence for heartbeat. Hence the patient was shifted to OT for Suction and Evacuation along Blood transfusion of 1 Packed cell volume. Pitocin (oxytocin-10 units in 500ml RL) was started to reduce risk of hemorrhage, uterine atony and to aid evacuation. The sample obtained intra operatively was grapelike structures and was sent for histo-pathology examination which confirmed the diagnosis of complete molar pregnancy.

Patient's recovery was unremarkable, patient was discharged

home after 48 hours.

The patient was instructed on importance of using reliable method of birth control that is barrier or hormonal contraception. and monitoring of levels of HCG (first 48 hours post evacuation, weekly until Hcg <5 miu/ml, then monthly X 6-12 months).

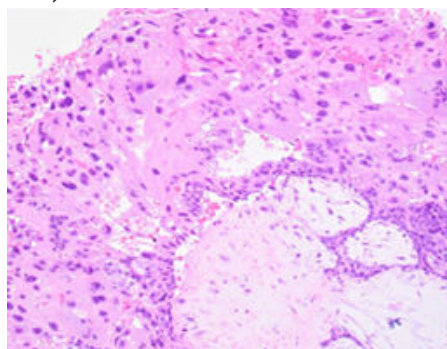


Figure A-Histopathology Section shows hydropic, edematous chorionic villi with central cistern formation and circumferential trophoblastic proliferation, characteristic of a complete hydatidiform mole. No fetal tissue is seen.

Table No-1 Serial Beta-HCG Monitoring in patient of complete molar pregnancy

Week post-curettage	Beta-HCG (mIU/mL)	Remarks
0 (Pre-Evacuation)	461,636	Before suction & evacuation
1	250,000	Good initial drop
2	142,000	Continued decline
3	83,000	Steady fall
4	47,000	Moderate drop
5	21,000	Marked decrease
6	7,200	Significant reduction
7	1,900	Near normalization
8	240	Almost negative
9	<5	HCG negative – remission achieved

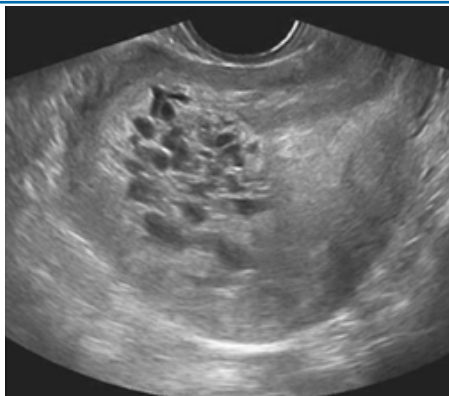


Figure B- Transvaginal ultrasound showing a classic appearance of a complete molar pregnancy ("snowstorm" or "cluster of grapes" appearance)



Figure C- Grape-like Products post suction and evacuation.

DISCUSSION -

Hydatidiform mole is principally a disease of chorion. It is best regarded as a benign neoplasia with malignant potential. Complete moles secrete high levels of beta-Hcg, much higher-than-normal pregnancy. This proves to have an important role as a tool when trying to diagnose a complete mole. The rapid rise in the beta-Hcg level is responsible for potential complications such as hyperthyroid features, theca lutein cysts, or preeclampsia with or without severe features. Thus, Patients diagnosed with molar pregnancy should be evaluated for potential medical complications such as anemia, toxemia, or hyperthyroidism. There is also a 6-32% chance of progression to malignant choriocarcinoma and about a 12-15% chance of progression to persistent GTD.

Few important points to remember about its management includes use of oxytocin, post evacuation beta Hcg monitoring and contraception.

Oxytocin ensures a gradual and controlled emptying of the uterus and prevent adverse outcomes.

The International Federation of Gynecology and Obstetrics (FIGO) suggests that intravenous oxytocin infusion may be started at the onset of suction curettage and continued for several hours postoperatively. This approach aims to enhance uterine contractility and decrease blood loss. However, FIGO acknowledges the theoretical concern regarding the potential for trophoblastic tissue embolization and recommends that the decision to use oxytocin be individualized based on the patient's clinical condition.

The ACOG recommends that for patients with H-mole, beta Hcg levels should be measured 48 hours after evacuation and

every 1 to 2 weeks until levels are undetectable. After attaining undetectable levels, follow-up measurements are made at monthly intervals for an additional 6 months.

Following molar pregnancy evacuation, effective contraception is essential to avoid pregnancy for at least 6-12 months to allow proper monitoring of β -Hcg levels and early detection of persistent gestational trophoblastic disease (GTD) or malignancy. Barrier methods such as condoms can be used immediately after evacuation and are commonly employed until hormonal contraception is initiated. Combined oral contraceptive pills (OCPs) are considered safe and effective once β -Hcg levels begin to decline and there is no evidence of persistent trophoblastic disease; they do not increase the risk of GTD recurrence. In contrast, intrauterine devices (IUDs) are not recommended in the immediate post-evacuation period due to the potential risk of uterine perforation or infection if any residual molar tissue remains. IUDs may be considered only after complete normalization of β -hCG levels and confirmation of no active disease.

CONCLUSION -

The patient presented with signs and symptoms suggestive of a first-trimester missed abortion. However, clinical evaluation revealed a uterus larger than expected for gestational age, markedly elevated serum β -hCG levels, and a characteristic 'snowstorm' appearance on ultrasonography, all of which were indicative of a molar pregnancy. The diagnosis was subsequently confirmed on histopathological examination (HPE) as a complete hydatidiform mole.

Molar pregnancy, a form of gestational trophoblastic disease, remains a significant clinical condition due to its potential for serious complications, including persistent trophoblastic disease and malignancy. Early diagnosis through characteristic ultrasound findings and markedly elevated β -hCG levels is critical for prompt management. Suction evacuation remains the mainstay of treatment, followed by close β -hCG monitoring to ensure complete resolution. Contraception and careful follow-up are essential to prevent interference with surveillance and to detect recurrence early. With timely intervention and vigilant post-evacuation care, the prognosis is excellent, and most patients achieve full recovery and retain future fertility potential.

REFERENCES

1. Berkowitz, RS, Goldstein, DP. Chorionic tumors. N Engl J Med 1996;335:1740-1748
2. Szulman, AE, Surti, U. The syndromes of hydatidiform mole. II. Morphologic evolution of the complete and partial mole. Am J Obstet Gynecol 1978;132:20-27
3. Szulman, AE, Surti, U. The syndromes of hydatidiform mole. I. Cytogenetic and morphologic correlations. Am J Obstet Gynecol 1978;131:665-671
4. Montes, M, Roberts, D, Berkowitz, RS, Genest, DR. Prevalence and significance of implantation site trophoblast atypia in hydatidiform moles and in spontaneous abortions. Am J Clin Pathol 1996;105:411-416
5. The diagnosis and management of molar pregnancy. In Goldstein DP