



## A CASE REPORT ON MOLAR PREGNANCY AFTER MTP

Dr. Thaarani T\*

Post Graduate OBG, Sree Balaji Medical College And Hospital. \*Corresponding Author

Dr. Kavita Sharma

Assistant Professor OBG, Sree Balaji Medical College And Hospital

**ABSTRACT** Molar pregnancy is a gestational trophoblastic disease which has malignant potency. Here by we were discussing a case of 30 years/ Gravida 3 Para 2 Live 2 Abortion 1 / previous vaginal delivery, who wants medical termination of pregnancy, was medically managed and on follow up UPT was positive and elevated Beta-HCG. Ultrasound findings of Focal cystic changes seen in trophoblastic tissue surrounding the sac with tiny amorphous fetal pole. Manual vacuum aspiration was done. Histopathology report – diagnosed was partial molar pregnancy. The patient was discharged and the beta HCG was regularly checked until the normal value achieved. This study discusses about the importance of timely diagnosis of molar pregnancy, investigation, difference between partial and complete molar pregnancy and management of molar pregnancy. The study also highlights the importance of misdiagnosis of molar pregnancy with missed abortion.

**KEYWORDS :** Beta-HCG, Molar pregnancy, Gestational trophoblastic disease.

## INTRODUCTION

Molar pregnancy, a rare and intriguing gestational disorder, poses unique challenges in both diagnosis and management. Its also termed as hydatidiform mole, a gestational trophoblastic disease. The most important features of molar pregnancy are hyperemesis, irregular vaginal bleeding, uterus size more than the period of gestation and missed abortion / early failed pregnancy. Rare presentations include hyperthyroidism, early onset pre-eclampsia, abdominal pain or abdominal distension due to theca lutein cysts.

## Pathophysiology Of Molar Pregnancy

Molar pregnancy encompasses complete and partial molar pregnancy. Complete molar pregnancies happen because of the fertilization of an empty ovum by either one or two sperm, leading to the formation of a diploid genome with 46 chromosomes, all paternally derived. The absence of maternal genetic material is a defining characteristic of complete mole. Due to the absence of fetus tissue, the trophoblast proliferates excessively, forming grapelike clusters of swollen villi that fill the uterine cavity. The abnormal trophoblastic tissue lacks the ability to differentiate into a normal embryo and placenta (Cavaliere et al., 2009). The excessive trophoblastic proliferation leads to the development of hydropic villi, which are swollen and cystic due to accumulation of fluid. This gives the characteristic appearance of a "bunch of grapes" on ultrasound. (Ie-Ming Shih, 2009).

Partial moles happen as a result of the fertilization of an ovum by two sperms or by a diploid sperm and haploid egg, leading to a triploid genome (69 chromosomes). There is an excess of genetic material, with contributions from both the maternal and paternal chromosomes. Partial moles may contain some fetal tissue, but this tissue is typically nonviable and exhibits abnormal development. Similar to complete moles, partial moles also display hydropic changes in the villi due to excessive trophoblastic proliferation (Petignat et al., 2003).

## Case Report:

A 30 year female from a lower middle class socioeconomic status, Gravida 3 Para 2 Live 2 Abortion 1, previous vaginal delivery, last child birth 11 months back, with LMP on 15/6/2023, underwent medical termination of pregnancy on 22/7/23 at outside clinic. Follow up after 2 weeks then UPT was done and found positive consulted outside and suggested to do Beta HCG – 67576. Since beta HCG was still high, USG Pelvis was done on 19 August 2023 which showed single intrauterine gestation corresponds to 9 weeks + 2days. Gestational sac was 31.33mm (8 weeks) and the CRL-5.4 mm (9 weeks +1 day). Focal cystic changes seen in trophoblastic tissue surrounding the sac with tiny amorphous fetal pole was observed. Cardiac activity was not observed. Patient was afebrile. No pallor/ icterus/ pedal edema. Breast observation was normal. Thyroid levels are normal. Cervix and vagina healthy, no abnormal discharge. Cervix was soft, uterus ~10-12 weeks size, os closed, fornices free. Hemoglobin level and blood count was normal. Thyroid levels, Renal function test, serum electrolytes and ECG were normal. Beta HCG was still elevated (67576). After the blood investigation, patient has been planned for suction and evacuation under ASA II. Manual vacuum aspiration and check curettage done. Products of conception aspirated

and sent to histopathology identification. Pathology results showed the presence of multiple grey black soft tissue fragments altogether measuring 5 cc with few areas showing grape like structures. Microscopical observation showed villi in two discrete populations. Large hydropic villi with irregularly shaped scalloped borders and small fibrotic villi. There is mild circumferential trophoblastic hyperplasia. The endometrium shows hypersecretory pattern. Histological features was consistent with partial mole.



Fig 1:

## Postoperative Period:

A course of IV Antibiotics was given and the patient was discharged on POD#1. Beta HCG levels were checked for three consecutive weeks followed by monthly determination until the levels of Beta-HCG becomes normal for 6 months. After evacuation Beta-HCG come back to normal level within 9 weeks. Patient was encouraged to use effective contraception like oral contraceptive pills or barrier methods. IUCD should not be inserted until the patient achieves normal beta HCG levels because of the risk of uterine perforation, bleeding, infection.

## DISCUSSION

Molar pregnancy is classified as full or partial based on karyotypic and microscopic histopathologic findings. In the partial molar pregnancy, two sperms were involved in the fertilization of the ovum. In this molar pregnancy, both the paternal and maternal chromosomes are expressed with the triploid chromosome of 69 XXY, 69XXX and 69 XYY karyotype (Berkowitz&Goldstein, 1995). During the first trimester, partial moles are frequently mistaken as missing or incomplete abortions. A single viable foetus coexists in less than 25% of partial mole pregnancies, with an estimated prevalence of 0.005-0.01% of all pregnancies (Al Ghadeer et al., 2022).

The incidence of molar pregnancy were very less. One in 160 pregnancies in India and the Middle East are found to be molar pregnant (Daftary et al., 2004). In Europe the incidence is still lesser (Savage et al., 2010). The risk of hydatidiform mole in the subsequent pregnancy after a full molar pregnancy has been reported to be 0.91 percent. However, the literature indicates that the risk after a partial mole in the previous pregnancy appears to be less (0.28%). If a normal viable gestation occurs after a molar pregnancy, the risk can be substantially reduced. Two molar pregnancies in a row raise the risk to 23 percent. A case report in India showed the occurrence of consecutive molar pregnancy for five times because of the presence of autosomal recessive condition which is very rare (Kumari et al., 2020).

In the present case study, we observed the single intrauterine gestation corresponds to 9 weeks+2 days. Cardiac activity was not observed, and the impression was found to be missed miscarriage or partial molar pregnancy.

The following points are emphasized in our case study.

- Assessing the patient's hemodynamic stability is the initial step in managing irregular vaginal bleeding.
- The amount or pattern of bleeding, however, does not prove a spontaneous abortion—not even in the event that the pregnancy test is positive.
- Additionally, a quantitative serum hCG evaluation and transvaginal ultrasonography have to be carried out.

## CONCLUSION

This study reported a case report of molar pregnancy underwent medical termination of pregnancy on 22/7/23 at outside clinic. Follow up after 2 weeks UPT was done and found to be positive. The patient got admitted in Sree Balaji Medical College and Hospital. After complete investigation, the patient has been planned for suction and evacuation under ASA II. The samples were sent for histopathology which showed the features of partial mole. The patient was discharged and the beta HCG was regularly checked until the normal value achieved.

## REFERENCES

1. Cavaliere A, Ermito S, Dinatale A, Pedata R. Management of molar pregnancy. *Journal of Prenatal Medicine*. 2009 Jan;3(1):15.
2. Ie-Ming Shih, Chapter 16 - Gestational Trophoblastic Lesions; Nucci MR. *Gynecologic pathology: a volume in the series: foundations in diagnostic pathology*. Elsevier Health Sciences; 2019 Dec 7.
3. Petignat P, Billieux MH, Blouin JL, Dahoun S, Vassilakos P. Is genetic analysis useful in the routine management of hydatidiform mole?. *Human Reproduction*. 2003 Feb 1;18(2):243-9.
4. Berkowitz RS, Goldstein DP. Gestational trophoblastic disease. *Cancer*. 1995 Nov 15;76(10 Suppl):2079-85. doi:10.1002/1097-0142(19951115)76:10+<2079::aid-cncr2820761329>3.0.co;2-o. PMID: 8635004.
5. Daftary SN, Padubidri VG. Trophoblastic diseases. *Shaw's Textbook of Gynaecology*. 13th ed. New Delhi: Elsevier India, Ltd. 2004:248-59.
6. Savage P, Williams J, Wong SL, Short D, Casalboni S, Catalano K, Seckl M. The demographics of molar pregnancies in England and Wales from 2000–2009. *J Reprod Med*. 2010 Jul 1;55(7-8):341-5.
7. Kumari S, Dhingra M, Ahmad SN, Singh A. Recurrent Molar in Five Consecutive Pregnancies—A Case Report. *International Journal of Women's Health*. 2020 Mar 9;171-4.
8. Al Ghadeer HA, Al Kishi N, Algurini KH, Albesher AB, Al Ghadeer MR, Als Salman AA, Bubshait AA, Alkishi BM, ALGURINI KH, Als Salman AB, Alkishi Sr BM. Partial molar pregnancy with Normal karyotype. *Cureus*. 2022 Oct 31;14(10).