



## MANAGEMENT OF A CASE OF MOLAR PREGNANCY IN BICORNUATE UTERUS: CASE REPORT

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### ABSTRACT:

Gestational trophoblastic disease is a common gynaecological problem with incidence of 1 in 1000 pregnancies. Uterine anomalies occur approximately in 0.5 to 10% of all women and hence presenting a rare case of molar pregnancy in bicornuate uterus. GTD is curable with accurate initial management. GTD produces high levels of human chorionic gonadotropin, which can be measured in either blood or urine and is extremely high in molar pregnancy. A 22 years old female gravida 2 para 1 living 1 with previous LSCS came to Bharati hospital with 4 months amenorrhea for routine antenatal check-up. Patient was not registered and uninvestigated. Patient was advised Obstetric USG which came suggestive of unicollis bicornuate uterus showing gestational sac of 5 centimeters in diameter with multiple cystic spaces with ecogenic content in right horn suggestive of molar pregnancy (snowstorm appearance). Her  $\beta$ -hcg was 24145.89 mIU/ml grossly corresponding to 16 weeks of pregnancy. Patient was posted for suction and evacuation after basic investigations. After suction and evacuation under GA, patient B-hcg was reevaluated. A decrease in  $\beta$ -hcg level to 19583.57 mIU/ml was suggestive of remission

**Key words:** Molar pregnancy, Beta-Hcg, Bicornuate uterus.

### Introduction

Gestational trophoblastic disease is a spectrum of abnormal gestation and neoplasms arising from villous or extravillous trophoblast that are associated with pregnancy. They are the lesions of trophoblast with different proliferative capacities including nonneoplastic hydatidiform moles (complete mole, partial mole and invasive mole) and neoplastic conditions (gestational choriocarcinoma, placental site trophoblastic tumor (PSTT), and epithelioid trophoblastic tumor (ETT)). Molar pregnancy (hydatidiform mole) is known as the pre-malignant form of gestational trophoblastic neoplasia. It is the most common form of the disease, and it is benign in nature [1,2,3]. There is a wide variation in incidence reported worldwide which has been contributed by genetic, demographic, environmental and host related factors. The incidence of GTN varies in different regions from 0.6 – 1.1 per 1000 pregnancies in Europe and North America to 2 per 1000 pregnancies in Japan [4]. In Asia, Indonesia has the highest

incidence [5], 1 in 77 pregnancies and 1 in 57 deliveries. In India and Middle East the incidence is believed to be 1 in 160 pregnancies. Gestational trophoblastic neoplasms (GTN) are proliferative as well as degenerative disorders of placental elements and include complete or partial hydatidiform mole (90%), invasive mole (5-8%) which could also be metastatic, villous or avillous choriocarcinoma (1-2%), and placental site tumor (1-2%) [6]. Gestational trophoblastic disease (GTD) refers to an abnormal trophoblastic proliferation composed of a broad spectrum of lesions ranging from benign, albeit premalignant hydatidiform mole (complete and partial), through to the aggressive invasive mole, choriocarcinoma, and placental site trophoblastic tumor (PSTT). Gestational trophoblastic neoplasia (GTN) refers to the aggressive form which has a capability for independent growth and metastases and requires chemotherapy. It includes invasive mole, choriocarcinoma, and PSTT. GTN may arise following evacuation of a molar pregnancy, followed by a normal term or

preterm pregnancy, abortion, or ectopic pregnancy. it is also referred to as persistent trophoblastic neoplasia (PTN). GTD may occur as a pregnancy complication in women of any age, it is more common at teenage or advanced maternal age (40–50 years) [7,8] The Royal College of Obstetricians and Gynecologists recommends that suspected complete molar pregnancies should be removed by suction evacuation, while suspected partial molar pregnancy should generally be removed via medical termination .However, hysterectomy is preferred option for good surgical candidates not desirous of future pregnancy and for older women who are likely to develop malignant sequelae[9,10]. Patients are recommended follow-ups to avoid risk of relapse or possibilities of developing persistent GTD. It is seen that women often do not follow-up to complete the recommended long protocol, causing significant amount of practical and emotional complications.

#### Risk Factors-

**Age-** woman who are younger than 20 years or older than 35 years have a higher risk of gtd. risk increases with age.

#### Previous molar pregnancy

**Nutrition/ Diet-** studies have linked low levels of carotene and vitamin a in a persons diet with higher risk of molar pregnancy.

**Family history of molar pregnancy-** rare cases of women in the same family having one or more molar pregnancy has been reported

#### Case Report:

A 22 years old female gravida 2 para 1 living 1 with previous LSCS came to Bharati hospital with 4 months amenorrhea for routine antenatal check-up. Patient was not registered and uninvestigated. Patient was advised Obstetric USG which came suggestive of unicollis bicornuate uterus showing gestational sac of 5 centimeters in diameter with multiple cystic spaces with ecogenic content in right horn suggestive of molar pregnancy (snowstorm appearance). There was no evidence of yolk sac or fetal pole and no vascularity was seen. Her  $\beta$ -hcg was 24145.89 miu/ml grossly corresponding

to 16 weeks of pregnancy. Patient was posted for suction and evacuation after basic investigations. Histopath report awaited.

#### Obstetric USG images of patient



Figure 1:



Figure 2:



Figure 3:



**Figure 4:**

### Discussion:

Usually patients with molar pregnancy have symptoms like hyperemesis gravidarum, vaginal bleeding, occasionally vaginal passage with grape like cysts, pelvic pain and respiratory distress clinical findings of uterine height corresponding to more than the gestational age and absence of fetal parts, high blood pressure and anemia. molar pregnancy is caused by abnormally fertilized egg. human cells normally contain 23 pair of chromosomes. one chromosome in each pair comes from father and the other from mother. in a complete molar pregnancy, an empty egg is fertilized by one or two sperm, and all of the genetic material is from the father. in this situation the chromosome from the mothers egg are lost or inactivated and the fathers chromosome are duplicated. in a partial or incomplete molar pregnancy, the mothers chromosome remain but the father provides two sets of chromosomes. as a result the embryo has 69 chromosomes instead of 46. this most often occurs when two sperm fertilize an egg resulting in an extra copy of fathers genetic material.

**Complication:** after removal of molar pregnancy, molar tissue may remain and continue to grow, known as persistent gestational trophoblastic neoplasia, occurring in around 15-20% of complete molar pregnancies and up to 5% in partial molar pregnancy. in some cases an invasive hydatidiform mole penetrates deep into middle layer of uterine wall causing vaginal bleeding. rarely a cancerous form k/a choriocarcinoma and spreads to other organs

### Conclusion:

After suction and evacuation under general anesthesia, patients  $\beta$ hcg was reevaluated. a decrease in  $\beta$ hcg level to 19583.57 mIU/ml after 1 week was s/o remission and patient was advised to follow up regularly till 6 months or complete remission of disease. Early detection of molar pregnancy should be done using  $\beta$ -hcg levels and usg and timely intervention and follow-up to achieve complete remission.

### References:

1. Barut A, Arıkan I, Harma M, Harma MI, Barut F, Coskan A. Recurrent partial hydatidiform mole. *J Pak Med Assoc* 2011;61:1016-7.
2. Mayun AA. Hydatidiform mole in Gombe: A five year Histopathological review. *Niger J Clin Pract* 2008;11:134-8.
3. Savage P. Molar pregnancy. *The Obstetrician & Gynaecologist* 2008;10:3-8
4. Berkowitz RS, Goldstein DP. In: Berck JS. *Gestational trophoblastic neoplasm*. Philadelphia, Lipincott, Williams and Wilkins, 2002;1353-74.
5. Aziz MF, Kampono N, Moigni EM. Epidemiology of gestational trophoblastic neoplasia at the Dr. Cipto Mangokusmo Hospital Jakarta, Indonesia. *Adv Exp Med Biol* 1984; 176: 165-75.
6. Miller FM, Laing FC. Gestational trophoblastic disease <http://brighamrad.harvard.edu/cases/bwh/hcache/34/full.html>.
7. B. J. Wagner, P. J. Woodward, and G. E. Dickey, "From the archives of the AFIP. Gestational trophoblastic disease: radiologic-pathologic correlation," *Radiographics*, vol. 16, no. 1, pp. 131-148, 1996. View at Publisher · View at Google Scholar · View at Scopus
8. S. D. Allen, A. K. Lim, M. J. Seckl, D. M. Blunt, and A. W. Mitchell, "Radiology of gestational trophoblastic neoplasia," *Clinical Radiology*, vol. 61, no. 4, pp. 301-313, 2006
9. Aghajanian P. Gestational trophoblastic disease. In: Decherney AH, Nathan L, Goodwin TM, Laufer N, editors. *Current Diagnosis Treatment in Obstetrics and Gynaecology* 10th ed. New York: Mc Craw

Hill Medical Publishing Division; 2007. p. 885-95.

10. Royal college of Obstetricians and Gynaecologists. The Management of

Gestational Trophoblastic Neoplasia. Green Top Guideline No. 38. London: RCOG; 2004.