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Original Research Article

# Clinical Presentation and Management of Hydatidiform Mole Cases

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**Abstract**

Hydatidiform mole is an abnormal pregnancy of clinical and epidemiological importance because it affects women in the reproductive age group and is potentially fatal with a lot of associated morbidities. Hydatidiform mole is the non- malignant form of gestational trophoblastic neoplasia. The prevalence of 1:250 to 1:500 has been reported which vary widely in different parts of the world. Therefore, Knowledge of prevalence and associated risk factors may add value in the management outcomes of molar pregnancy in our setting. Objectives of this study was to determine the clinical presentation and management outcome of Hydatidiform mole . We assessed 30 women who clinically diagnosed with hydatidiform mole in Tertiary Hospital during 2019-2021 . The diagnosis of HM was based on a pelvic ultrasonography, quantitative estimation of the serum We assessed 30 women who clinically diagnosed with hydatidiform mole Tertiary Hospital. 66.66 % cases had Uterine size> Gestational age. 93.33 % cases had Vaginal bleeding. 50% cases had Hyperthyroidism. 96.66 % cases were treated by Uterine suction evacuation and curettage. Hydatidiform mole remains an important cause of maternal morbidity which is largely due to poor and inadequate follow-up. Better outcome is possible with good patients' counseling for improved follow up.

**Key words** :Pregnancy , Hydatidiform mole , clinical presentations.



## Introduction

Hydatidiform mole also known as molar pregnancy is a benign form of gestational trophoblastic disease (GTD) in which there is abnormal development of the placenta. Gestational trophoblastic disease is a spectrum of placental disorders which include the benign partial and complete moles and the malignant invasive mole, choriocarcinoma and placenta site tumours.[1-2] The hydatidiform mole is classified into two, complete and incomplete moles based on the morphology, karyotype and histologic appearance. The hydatidiform mole results from an abnormal pregnancy in which an anuclear ovum is fertilized. It is a complete mole when an empty ovum is fertilized by a haploid 23X sperm (which duplicates its chromosomes to yield a 46xx complement), or the anuclear ovum is fertilized by two sperm (23X and 23Y) to yield a 46xy karyotype. [3] The partial moles are triploid (69XXX or 69XXY) with two sets of paternal and one set of maternal chromosomes. [4]This disease can occur even during or after intrauterine or ectopic pregnancy. Reports of the incidence of molar pregnancy vary by geographic region.[5,6] It is generally accepted that the incidence is very high in developing countries. The incidence is higher in women younger than 20 years and older than 40 years of age.[7,8,9] 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.[10,11,12] In the far East, figures of 1 in 500 (Singapore), 1 in 294 (Japan), and 1 in 314 (Iran) have been reported. In Nigeria, a high figure of 1 in 379 has also been reported.[13,14 ] Hydatidiform Mole presents with amenorrhoea, vaginal bleeding and spontaneous passage of grape-like vesicles, high serum and urinary ß human chorionic gonadotrophin (ßHCG) levels. There may also be hyperemesis gravidarum, doughy uterus, inappropriate uterine size, bilateral theca lutein cyst and rarely, features of thyrotoxicosis and pre-eclampsia in the first half of pregnancy. [15,16,17] Hydatidiform mole should be removed by suction evacuation, while suspected partial molar pregnancy may require a combination of medical and surgical treatment as the fetal parts can present an obstacle to suction evacuation. However, hysterectomy remains an option for good surgical candidates not desirous of future pregnancy and for older women who are likely to develop malignant sequelae. Following evacuation, in the majority of cases, the residual trophoblastic cells are unable to continue to proliferate for long, and the fall in serum hCG level is a very accurate indication of their declining activity. The study aims to determine the clinical presentations, diagnosis, and management of molar pregnancy managed at Tertiary Hospital

## Material and Method

We assessed 30 women who were clinically diagnosed with hydatidiform mole in Tertiary Hospital during 2019-2021. The diagnosis of HM was based on a pelvic ultrasonography, quantitative estimation of the serum We assessed 30 women who clinically diagnosed with hydatidiform mole in Tertiary Hospital. The diagnosis of HM was based on a pelvic ultrasonography, quantitative estimation of the serum beta human chorionic gonadotrophin (B-hCG) and confirmed by histopathologic specimen taken during suction evacuation. The study was conducted in accordance to the Helsinki declaration and the verbal consent was taken from each participant. A designed questionnaire was prepared and filled by direct interview. The data included were; maternal age, parity, last menstrual cycle, education, socioeconomic status, history of prior molar pregnancy, past gynecological history and clinical presentation. Complete medical and obstetrical examination was performed, including vitals, chest examination, abdominal assessment of the fundal height and adnexal masses. Vaginal examination was performed looking for bleeding and uterine size.The investigations requested for all subjects were complete blood count, blood group, Rh typing, HCG level, and estimation of T3, T4 and TSH levels. Urinalysis for proteinuria and ketone bodies, pelvic and abdominal ultrasound and chest X-ray were obtained. After suction and evacuation (S&E), multiple specimens were sent for histopathologic study. The biological follow-up after S&E was performed as standard. Each patient was asked to do the β-hCG level measurements. All cases with HM were diagnosed and managed during the the study period. Patients who showed normalization of hCG levels were prevented from pregnancy during the first year by using either condom or combined contraceptive pills. After completing the first year, the follow-up was expanded for further 2 years, consisted of regular 3 monthly visits. Patients were evaluated for vaginal bleeding, uterine enlargement, cycles regularities, and pregnancy. The investigation in each visit included complete blood count, the hCG level if indicated, and pelvic ultrasonography. The data was collected, computerized, summarized and statistically analyzed with Microsoft excel.

## Results

**Table 1 : Distribution of Age of subjects**

| Age in years | Number of subjects n=30 | Percentage |
|---|---|---|
| <20 | 02 | 6.6 % |
| 21-25 | 08 | 26.66 % |
| 26-30 | 12 | 40 % |
| 31-35 | 05 | 16.66 % |
| 36-40 | 03 | 10% |

**Table 2 : Uterine size**

| Uterine size | Number of subjects | Percentage |
|---|---|---|
| > Gestational age | 20 | 66.66 % |
| = Gestational age | 05 | 16.66 % |
| < Gestational age | 05 | 16.66 % |

66.66 % cases had Uterine size> Gestational age

**Table 3 : Clinical features of Hydatidiform Mole**

| Clinical features | Number of subjects | Percentage |
|---|---|---|
| Vaginal bleeding | 28 | 93.33 % |
| Vomiting | 01 | 3.33 % |
| Abdominal pain | 10 | 33.33 % |
| Anemia | 12 | 40 % |
| PIH | 02 | 6.66 % |
| Invasive mole | 01 | 3.33 % |

93.33 % cases had Vaginal bleeding

**Table 4 : Clinical complications**

| Complications | Number of subjects | Percentage |
|---|---|---|
| Hyperthyroidism | 15 | 50% |
| Hemorrhage | 02 | 6.6% |
| Sepsis | 01 | 3.33% |
| Pulmonary embolism | 01 | 3.33% |

50% cases had Hyperthyroidism

**Table 5 : Treatment oh Hydatidiform Mole**

| Treatment | Number of subjects | Percentage |
|---|---|---|
| Uterine suction evacuation and curettage | 29 | 96.66 % |
| Hysterectomy | 01 | 3.33 % |

96.66 % cases were treated by Uterine suction evacuation and curettage.

**Discussion**

Many reports have mentioned the incidence of molar pregnancy, but such reports have been limited by the lack of a precise and reproducible definition of the disease. The wide variation in the frequency of molar pregnancy has been reported. This increased high incidence of molar pregnancy in our center may be due to the status of the teaching hospital as a referral center from various clinics both private and public.

There is need for early ultrasound examination in all pregnancies. In addition, there should be an evaluation of all patients with history of amenorrhea, since with routine first trimester ultrasonography, a significant proportion of patients has been identified, even though they may be asymptomatic at the time of diagnosis.[18] Besides amenorrhea, this study revealed that the most common clinical manifestation of molar pregnancy is abnormal vaginal bleeding. This occurred in more than 93% of cases. This agrees with documentations in the literature where more than 90% of patients with molar pregnancies presented with abnormal uterine bleeding, usually during the first trimester.[19] Regarding the complications associated with molar pregnancies, this study had demonstrated that hypertension, acute hemorrhage, and pre-eclampsia/eclampsia. Approximately 6.6% of the studied patients had pre-eclampsia. This agrees with findings of other studies.[20] In explaining this, Aghajanian observed that pre-eclampsia in the first trimester or early second trimester – an unusual finding in normal pregnancy – is pathognomonic for hydatidiform mole. Hyperthyroidism was detected in more than 50% of cases. This could arise from stimulation of thyrotropin receptors by hCG.[21] Hyperthyroidism occurring in patients with molar pregnancies is usually sub-clinical, and most patients remain asymptomatic. This rather high incidence of hyperthyroidism detected in our study suggest that a comprehensive pre-treatment hormonal evaluation should be conducted in molar pregnancy cases to prevent serious complications such as thyroid storm that could arise in these patients. Suction evacuation was done in 96.66% of cases. Following evacuation of the uterus, the use of contraceptive is recommended so that pregnancy is avoided for 12 months to minimize any deleterious effects on the developing oocytes and to minimize the confusion over disease relapse from hCG produced in pregnancy. It is recommended that patients should be seen at 4-weekly intervals for 1 year. Suction curettage was the method of uterine evacuation in all the patients except 1 case in this study. This is the recommended management modality because it allows for rapid evacuation of the uterus irrespective of uterine size with minimal blood loss. It also provides specimen for histological assessment of the product of conception, reduces the danger of uterine perforation, minimizes injury to the blood vessels and therefore reduces the chance of trophoblastic tissue embolism.[22] Hydatidiform mole remains an important cause of maternal morbidity in our Centre which is largely due to poor and inadequate follow-up. Better outcome is possible with good patients' counseling for improved follow up.

**Conclusion**

A Large numbers of patients with H-mole came to the Hospital so late with high uterine fundal level above the umbilicus and may be with preeclampsia. Uterine suction evacuation and uterine curettage were done for most cases. The use of Ultrasonography in the evaluation of vaginal bleeding in early pregnancy, as well as histologic evaluation of products of conception, is important in early diagnosis and treatment H-mole. Hydatidiform mole remains an important cause of maternal morbidity which is largely due to poor and inadequate follow-up. Better outcome is possible with good patients' counseling for improved follow up.

**References**

1. Seckl MJ, Sebire NJ, Berkowitz RS. Gestational trophpblastic disease. Lancet, 2010; 376 (9742): 717-729.
2. Savage P, Seckl M. Trophoblastic disease. In: Edmond DK, editor. Textbook Obstetrics and Gynaecology for postgraduates. 7th edition. London: Blackwell scientific publications, 2007; 117-124.
3. Berkowitz RS, Goldstein DP. Gestational trophoblastic disease. In: Rayan KJ, Berkowitz RS, BaribieriDunaif A, editors. KistnersGynaecology and women's health. 7th edition. St Louis Missouri: Mosby Inc, 1990; 218-230.
4. Bagshawe KO, Lawlar SD. Hydatidiform mole and Choriocarcinoma. In: Shaw RW, Souter WP, Staton SL. Gynaecology. Edinburgh: Church Livingstone, 1992; 453-468.
5. Berkowitz RS, Goldstein DP. Chorionic tumors. N Engl J Med. 2000;335:2011–2018.

6. Park WW. Choriocarcinoma: A study of its pathology. London: William Heinemann Medical Book. 2016:58.
7. Anuma ON, Umeora OU, Obuna JA, et al. Profiling gestational trophoblastic diseases in a tertiary hospital in South East Nigeria. Trop J ObstetGynaecol. 2012;26:157–164.
8. Mbamara SU, Obiechina NJ, Eleje GU, et al. Gestational trophoblastic diseases in tertiary hospital in Nnewi, South-East Nigeria. Niger Med J. 2012;50;87-9.
9. Ocheke AN, Musa J, Uamai AO. Hydatidiform mole Jos, Nigeria. Niger Med J. 2011;52(4);223–236.
10. Houry DE, Salhi BA. Acute complications of pregnancy. In: Marx JA, Hockberger RS, Walls RM, et al.(editors). Rosen's Emergency Medicine. Philadelphia, PA: Elsevier Saunders; 2014:178.
11. Yakasai IA, Adamu N, Galadanchi HS. Ruptured tubal molar pregnancy. Niger J Clin Pract. 2012;15:491–493.
12. Snyman LC. Gestational trophoblastic disease; an overview. South AfrJ Gynaecol Oncol. 2009;1:32–36.
13. Kaye DK. Gestational trophoblastic diseases following complete hydatidiform mole in Mulago Hospital Kampala, Uganda. AfrHealth Sci. 2002;2:47–51.
14. Dim CC, Ezegwui HU. Choriocarcinoma in Enugu, South-East Nigeria; a need for a shift from mortality to survival. Niger J Med. 2012;22;123– 127.
15. Boufettal H, Coullin P, Mahdaoui S, et al. Complete hydatidiform mole inmorocco epidemiological and clinical study. J GynaecolObstet-Biol Reprod. 2011;40;419–429.
16. Berkowtz RS, Bernstein MR, Harlow BL, et al. Case control study of risk factors for partial molar pregnancy. Am J ObstetGynaecol. 2015;173:788–792.
17. Mayun AA, Rafinadadi AH, Shehu MS. Choriocarcinoma in northwest Nigeria, a histopathologcal review. Niger J Med. 2016;22;123–127. 16
18. 18.Agboola A. Trophoblastic tumours. Textbook of Obstetrics and Gynaecology for Medical Students. 2nd ed. Ibadan: Heinemann Educational Books (Nigerian) Plc.; 2006. p. 218-24.
19. Obiechina NJ, Udigwe GO, Obi RA. Molar pregnancy: A ten year review at onitsha, Nigeria. J Med Invest Pract 2001;3:26-31.
20. Eniola OA, Mabayoje P, Ogunniyi SO. Hydatidiform mole in Ile-Ife, Nigeria: A 10-year review. J ObstetGynaecol 2001;21:405-7.
21. Royal college of Obstetricians and Gynaecologists. The Management of Gestational Trophoblastic Neoplasia. Green Top Guideline No. 38. London: RCOG; 2004.
22. Garret LA, Garner EI, Feltmate CM, Goldstein DP, Berkowitz RS. Subsequent pregnancy outcomes in patients with molar pregnancy and persistent gestational trophoblastic neoplasia. J Reprod Med., 2008; 53: 481-486.