|| ISSN(online): 2589-8698 || ISSN(print): 2589-868X ||
International Journal of Medical and Biomedical Studies
Available Online at www.ijmbs.info
NLM (National Library of Medicine ID: 101738825)
Index Copernicus Value 2018: 75.71
Original Research Article
Volume 4, Issue 10; October: 2020; Page No. 05-06

HYDATIDIFORM MOLE: A REVIEW OF MANAGEMENT OUTCOMES IN A TERTIARY HOSPITAL, SIR T HOSPITAL, BHAVNAGAR

[1]Dr. Vasava Amarpali Puransinh, [2*]Dr. Kanaklata D. Nakum, [3]Dr. Aditi Vithal
[1]Resident 3rd Year, [2*]Professor and HOD, [3]Assistant Professor
[1,2,3]Department of Obstetrics and Gynaecology, Government Medical Collage Bhavnagar and Sir T Hospital, Bhavnagar, Gujarat.

Article Info: Received 10 September 2020; Accepted 08 October 2020
DOI: https://doi.org/10.32553/ijmbs.v4i10.1453
Corresponding author: Dr. Aditi Vithal
Conflict of interest: No conflict of interest.

Abstract
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. 20 women who clinically diagnosed with hydatidiform mole in Tertiary Hospital, Sir T Hospital, Bhavnagar were included in study. 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. 60% patients were of age between 20-25 years, 60% patients had gestational period between 1-2 months. All 20 patients had bleeding PV. 1 patient developed PIH. 2 patients had ovarian enlargement. 1 patient had invasive mole. No patient had choriocarcinoma. 55% patient developed hyperthyroidism. 1 patient had complication of pulmonary embolism. All 20 patients were treated by uterine suction and evacuation. 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. There is need for early recognition, timely referral, prompt and proper treatment of this condition.
Keywords: Hydatidiform mole, suction evacuation, human chorionic gonadotrophin (B-hCG)

Introduction

Hydatidiform mole (H. mole) belongs to a spectrum of disease known as gestational trophoblastic disease (GTD), resulting from overproduction of the chorionic tissue, which is normally supposed to develop into the placenta. Hydatidiform mole (molar pregnancy) is the non-malignant form of gestational trophoblastic neoplasia.[1,2] It is of clinical and epidemiological interest because of its significant complication in pregnancy. Hydatidiform moles are non-viable, genetically abnormal conceptions, showing excessive expression of paternal genes. In this condition, the placental tissues develop into an abnormal mass. Often, there are no fetal parts at all. However, partial moles may show presence of fetal tissue. This disease can occur even during or after intrauterine or ectopic pregnancy. Reports of the incidence of molar pregnancy vary by geographic region.[3–5] 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.[6–8] 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.[9–11] 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.[12,13]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.[14,15] 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 risk factors, clinical presentations, diagnosis, and outcomes of molar pregnancy managed at Tertiary Hospital , Sir T Hospital , Bhavnagar.

Material and Methods:

We assessed 20 women who clinically diagnosed with hydatidiform mole Tertiary Hospital, Sir T Hospital, Bhavnagar. 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 2007.

Results:

Table1: Maternal Characteristics

Maternal Characteristics	Frequency (20)	Percentage
Age (Years)		
20-25	12	60 %
26-30	07	35 %
>30	01	05 %
Parity		
0	05	25 %
1	15	75 %
Months of amenorrhea (Gestational period)		
1-2	12	60 %
2-3	04	20 %
3-5	04	20 %

Table 1 shows 60% patients were of age between 20-25 years. 75% patients of H. Mole had 1parity . 60% patients had gestational period between 1-2 months.

Table 2: Gestational age and uterine size

Gestational age and uterine size	Frequency (20)	Percentage
Uterine size > Gestational Age	12	60 %
Uterine size = Gestational Age	04	20 %
Uterine size < Gestational Age	04	20 %

60% patients had uterine size greater than gestational age. 20 % patients had uterine size equal to gestational age . 20 % patients had uterine size less than gestational age.

Table 3: The clinical manifestations of the patients

The clinical manifestations	Frequency(n=20)	Percentage
Bleeding PV	20	100 %
Hyperemesis gravidarum	0	0 %
PIH	01	5 %
Ovarian enlargement	02	10 %
Invasive mole	01	5 %
choriocarcinoma	0	0 %

Table 3 show all 20 patients had bleeding PV . 1 patient developed PIH. 2 patients had ovarian enlargement. 1 patient had invasive mole. Non patient had choriocarcinoma.

Table 4: The clinical complications of the patients

Complications	Frequency(n=20)	Percentage
Hyperthyroidism/Thyrotoxicosis	11	55 %
Hemorrhage	0	0 %
Sepsis	0	0 %
Pulmonary embolism	01	5 %

55% patient developed hyperthyroidism . 1 patient had complication of pulmonary embolism.

Table 5: Treatment of the patients

Treatment	Frequency(n=20)	Percentage
Uterine suction evacuation and curettage (D&C)	20	100 %
Hysterectomy	0	0 %

All 20 patients were treated by uterine suction and evacuation.

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.[16-18] 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. This study has revealed that the incidence of molar pregnancy among the nulliparous women was almost 25%. This finding is in line with the documentations in the literature,[19] This is disheartening because these nulliparous women were just beginning their reproductive career. Our study has shown that more than 60% of the patients were in their 1st trimester of pregnancy at the time of diagnosis. This data is

similar to the result of previous studies and documentations in the literature. This reflects the fact that 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.[20] Besides amenorrhea, this study revealed that the most common clinical manifestation of molar pregnancy is abnormal vaginal bleeding. This occurred in more than 100% 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.[21] Regarding the complications associated with molar pregnancies, this study had demonstrated that hypertension, acute hemorrhage, and pre-eclampsia/eclampsia. Approximately 5% of the studied patients had pre-eclampsia. This agrees with findings of other studies.[22] 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 55% of cases. This could arise from stimulation of thyrotropin receptors by hCG.[23] 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 in100% 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. A follow-up period longer than 1 year is no longer advocated.[24] .

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. There is need for early recognition, timely referral, prompt and proper treatment of this condition. Adequate follow-up of the patients should be reinforced.

References:

1. Rosai J. Pregnancy, trophoblastic disease and placenta. Rosai and Ackerman's surgical pathology. Louis, Washington: Elsevier. 2012;1636–1645.
2. Shih IM. Gestational trophoblastic neoplasia-pathogenesis and potential therapeutic targets. Lancet Oncol. 2007;8(7):642–650.
3. Berkowitz RS, Goldstein DP. Chorionic tumors. N Engl J Med. 2000;335:2011–2018.
4. Park WW. Choriocarcinoma: A study of its pathology. London: William Heinemann Medical Book. 2016:58.
5. Anuma ON, Umeora OU, Obuna JA, et al. Profiling gestational trophoblastic diseases in a tertiary hospital in South East Nigeria. Trop J Obstet Gynaecol. 2012;26:157–164.
6. 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.
7. Ocheke AN, Musa J, Uamai AO. Hydatidiform mole Jos, Nigeria. Niger Med J. 2011;52(4);223–236.
8. 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.
9. Yakasai IA, Adamu N, Galadanchi HS. Ruptured tubal molar pregnancy. Niger J Clin Pract. 2012;15:491–493.
10. Snyman LC. Gestational trophoblastic disease; an overview. South Afr J Gynaecol Oncol. 2009;1:32–36.
11. Kaye DK. Gestational trophoblastic diseases following complete hydatidiform mole in Mulago Hospital Kampala, Uganda. Afr Health Sci. 2002;2:47–51.
12. 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.
13. Boufettal H, Coullin P, Mahdaoui S, et al. Complete hydatidiform mole in morocco epidemiological and clinical study. J Gynaecol Obstet Biol Reprod. 2011;40;419–429.
14. Berkowtz RS, Bernstein MR, Harlow BL, et al. Case control study of risk factors for partial molar pregnancy. Am J Obstet Gynaecol. 2015;173:788–792.
15. Mayun AA, Rafinadadi AH, Shehu MS. Choriocarcinoma in northwest Nigeria, a histopathologcal review. Niger J Med. 2016;22;123–127.
16. Kim SJ, Bae SN, Kim JH, Kim CJ, Han KT, Chung JK, et al. Epidemiology and time trends of gestational trophoblastic disease in Korea. Int J Gynaecol Obstet 1998;60:33-8.
17. Limpongsanurak S. An epidemiological study of hydatidiform moles conducted in chulalongkorn hospital. Chula Med J 1994;38:659-65.
18. Srangsriwong S. Molar pregnancy in sappasithiprasong hospital. Med J Ubon Hosp 1995;16:187-94.
19. 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.
20. Agboola A. Trophoblastic tumours. Textbook of Obstetrics and Gynaecology for Medical Students. 2nd ed. Ibadan: Heinemann Educational Books (Nigerian) Plc.; 2006. p. 218-24.
21. Obiechina NJ, Udigwe GO, Obi RA. Molar pregnancy: A ten year review at onitsha, Nigeria. J Med Invest Pract 2001;3:26-31.
22. Eniola OA, Mabayoje P, Ogunniyi SO. Hydatidiform mole in Ile-Ife, Nigeria: A 10-year review. J Obstet Gynaecol 2001;21:405-7.
23. Royal college of Obstetricians and Gynaecologists. The Management of Gestational Trophoblastic Neoplasia. Green Top Guideline No. 38. London: RCOG; 2004.
24. Batorfi J, Vegh G, Szepesi J, Szigetvari I, Doszpod J, Fulop V. How long should patients be followed up after molar pregnancy? Analysis of serum HCG follow-up data . Eur J Obtet Gynecol Reprod Biol 2004;112:95-7.