

Clinical Evaluation and Management of Molar Pregnancy in Cumilla Medical College Hospital

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ABSTRACT

Background: A molar pregnancy is also known as hydatidiform mole, which is a benign tumor that develops in uterus, characterized by proliferation of trophoblastic tissue. Among the GTD (gestational trophoblastic disease) hydatidiform mole is the most common form. It begins when an egg is fertilized but normal viable pregnancy does not occur.

Objective: The aim of the study was to explore the incidence, clinical presentation, management, complications and outcome of the molar pregnancy in Cumilla Medical College Hospital.

Method: This study was conducted by Department of Obstetrics and Gynaecology in Cumilla Medical College Hospital over a period of 6 months from October 2018 to March 2019. All pregnant women who were diagnosed as molar pregnancy were included in the study.

Results: In this study the incidence of molar pregnancy was 1.7 per hundred pregnancy. Among the patients 90 % were complete mole, 46% patient were in the age group of 20-29 years, 54% were G2-G4, 64% patient were lower class and 60% patient educated to secondary level. Common presentations were bleeding per vagina 56%, and pain in the lower abdomen 18%. Blood group was A(+ve) in 48% patient and serum beta HCG level 1-2 lac in 40 % patients. Treatment done by suction evacuation and curettage in 96%

patients and 4% patients needed hysterectomy. Only 60% patients had regular follow up. 70% patient cured completely, and 1 patient died due to complications of choriocarcinoma.

Conclusion: Gestational trophoblastic disease can be treated successfully with nearly 100% cure rate especially when follow-up is adequate. So, to achieve high cure rate, early diagnosis by 1st trimester ultrasonogram and regular effective follow up program and treatment protocol should be established.

Keywords: Molar Pregnancy, Clinical Evaluation, Management.

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INTRODUCTION

Molar pregnancy is also known as hydatidiform mole which is a benign tumor that develops in uterus. GTD (gestational trophoblastic disease) defined as heterogeneous group of interrelated lesions arising from the trophoblastic epithelium of the placenta after abnormal fertilization.¹ It includes various lesion such as (according to WHO) benign trophoblastic lesion (placental site nodule, exaggerated reaction), hydatidiform mole (complete, partial) and gestational trophoblastic neoplasia (invasive mole, placental site trophoblastic tumor, choriocarcinoma, epitheloid

trophoblastic tumor). Broad variations in the incidence of GTD have been reported in different parts of the world.^{2,3} Risk factors include extreme of reproductive age, multiparity, past history of spontaneous abortions, less dietary intake of animal fat, beta carotene and ethnicity.^{3,4}

Blood group also plays role in some part. If a woman with blood group 'A' mated with the man of same blood group is at least risk and women with blood group 'AB' is at greatest risk. Patient with of hydatidiform mole presented with nausea, vomiting which may

be confused with signs of early pregnancy or hyperemesis gravidarum.⁴ Among the patients, 2% presented with breathlessness due to pulmonary embolization of trophoblastic cells and another 2% patient presented with thyrotoxic features like tremor, tachycardia. In one third of cases preeclampsia appear earlier than usual.⁵ About 50% patients have a uterine size greater than expected gestational age, but in 33% uterus may be smaller than the expected size. Multiple theca lutean cyst are seen in 15-30% patients.⁶ Hydatidiform mole can be detected early by using ultrasound and serial monitoring of the serum human chorionic gonadotropin (HCG) hormones. In order to meet the gold standard for the diagnosis of hydatidiform mole, product of conception must be submitted for further histopathological analysis. Suction evacuation and curettage is the preferred choice of treatment irrespective of uterine size.⁷

In all cases of molar pregnancy observation is essential to detect the reawakening of chorionic activity even though the mole has been removed by hysterectomy. Follow up was done with serial beta HCG estimation, gynaecological examination and chest radiography. Approximately 70% patients developed a normal beta HCG within 8 weeks post evacuation and 15% demonstrate continuous decline in titer and ultimately achieve normal titer without treatment. Rest of the 15% patient who have elevated titer at 8 weeks after evacuation demonstrate rising titer or plateau.⁴

METHOD

This observational study was conducted at Department of Obstetrics and Gynaecology in Cumilla Medical College Hospital over a period of 6 months from October 2018 to March 2019. The clinical records of the patients with molar pregnancy regarding age of the patient, parity, gestational age, mode of presentation, clinical findings, investigations, management and histopathology report were collected. During the study period there were 50 cases of molar pregnancy admitted out of 2873 pregnancies. Investigations include complete blood count, blood grouping and Rh typing, beta HCG level, ultrasonography and chest x-ray. Hydatidiform mole was confirmed by histopathological examination of the specimen. Data were collected, analyzed and edited by simple statistical calculation.

RESULTS

Over a period of six months total 2873 patients were admitted for delivery, during this period of which 50 cases were hydatidiform mole. Therefore, incidence of molar pregnancy was 1.7 per 100 pregnancies. Among them 90% were complete mole and 10% were partial mole. Most of the patients belong to the age group of 20-29 years (46%) (Table-I), most of them were gravida 2-4 (54%) (Table-II). About 64% patient came from lower class family and 30% from middle class. Among the patients, 60% were educated at secondary level and 28% were educated at primary level. Most common presentation was bleeding per-vagina (56%) and 18% with pain in lower abdomen and diagnosed on ultrasonography (Table-III).

The uterine height was more than the period of gestation in 60% patients and 32% correspond with the period of gestation. The blood group was A (+)ve in 48%, B (+)ve in 30% and 14% patients were AB (+)ve (Table-IV). Serum beta HCG level within 1-2 lac in 40% patients and more than 2 lakhs in 30% patients and less than 1 lakh in 30% patients. Suction evacuation and curettage done in

96% patients and 4% patient required total abdominal hysterectomy due to perforation (one was perforating mole and another iatrogenic perforation) (Table-V).

Table I: Distribution of GTD according to age group (n=50)

Age in years	n	%
<20	15	30
20-29	23	46
30-40	09	18
>40	03	06

Table II: Distribution of parity in molar pregnancy (n=50)

Gravida	n	%
Primi	15	30
G2-G4	27	54
G5-G6	05	10
G7-G8	03	06

Table III: Distribution of patient various clinical presentation of mole (n=50)

Presenting features	n	%
Vaginal bleeding	28	56
Vaginal bleeding and passage of vesicles	07	14
Lower abdominal pain	09	18
Exaggerated sign symptoms of pregnancy	02	4
Diagnosed during routine USG	02	4
Amenorrhea with preeclampsia	02	4

Table IV: Distribution of patient according to blood group (n=50)

Blood grouping with Rh typing	n	%
A (+)ve	15	30
B (+)ve	24	48
AB (+)ve	07	14
O (+)ve	04	8

Table V: Distribution of patient treatment modalities of molar pregnancy (n=50)

Treatment received by the patient	n	%
Suction evacuation and curettage	48	96
Suction evacuation followed by total abdominal hysterectomy	02	04

Table VI: Distribution of patient according to outcome of the disease (n=50)

Treatment outcome	n	%
Completely cured	35	70
Persistence of disease	04	8
Lost from the study	11	22
Died	01	2

Regarding follow up, 60% patient had regular follow-up, 18% were in irregular follow-up and 22% did not underwent any follow-up. Follow-up underwent thorough history, clinical examination and investigations like beta HCG, x-ray chest and ultrasonography. Among them 35 patients (70%) were cured completely, 4 patients (8%) developed persistence disease, 11 patients (22%) lost from the study and 1 of the lost patient was admitted with severe respiratory distress due to lung metastases as a complication of choriocarcinoma and died (Table-VI).

DISCUSSION

In this study- Incidence, clinical presentation, management and outcome of molar pregnancy cases admitted in Cumilla Medical College Hospital was analyzed. In our study, incidence of molar pregnancy was 1.7 per 100 pregnancies over the study period. Most of the analyzed patients were 20-29 years of age (46%) and vaginal bleeding were the main presentation (56%). 96% patients were treated by suction evacuation and curettage, 60% of the patients had regular follow-up and 70% patients among the total patients were completely cured.

There was wide geographical variation in the incidence of molar pregnancy. In this present study, the incidence of were 1.7 per 100 pregnancies which is less than the study of Musammat Nargis Samima et al (5.3%), Pinky Lakra (2.3%) and Sunila Villhalrao (4.0%) and Juglul et al (8.27%).⁷⁻¹⁰ These variations in the incidence of molar pregnancy are a result of differences in methodology, classification of mole and case detection.

In this study, maximum of patients (46%) was between 20-29 years age group. Study by Nahar showed 64% patients were 20-29 years age group.¹¹ But in Nawras's study showed 38% were in the age group of 14-21 years¹². In this study 54% patients were multigravida and 30% patients were primi gravida. The study by Musammat Nargis Shamima 81.2% were multi gravida and 18.8% were primigravida.⁷ Again, in Sunil Vitthalrao Jagtap's study showed 48% patient were multigravida and 44% patient were primigravida.^{7,9} This present study stated that molar pregnancy prevalence is more in multigravida. In this study showed 64% patients were from lower class which is more or less consistent with Musammat's 58.4% and Denish Kumar et al 86%.^{7,13} In present study most of the patients with molar pregnancy had blood group 'B (+)ve' (48%). In Larka's study blood group was 'A (+) ve' in 42.1% and Jaglul's study 36% blood group was 'B (+)ve' which is consistent with present study.^{8,10}

In this study most common presentation was vaginal bleeding (56%) followed by pain abdomen in 18% and passage of vesicle in 14% cases. Similar result was found in Jaglul et al study that is 60% patient with vaginal bleeding and 16% patient was passage of vesical¹⁰. A study by Fatima M. et al noted 94.20% cases had bleeding pervagina, Sunil's study showed 73% cases presented with vaginal bleeding which is more or less similar to our study.^{9,14} Therefore all the above studies support the current study findings where vaginal bleeding is the most common clinical feature.

In 60% cases, size of uterus was more than the gestational period, 32% corresponds and 8% cases smaller than the period of gestation. In another study of India, 70% woman had height of uterus larger, 20% had corresponding to period of amenorrhea, while 10% uterine height less then period of amenorrhea.¹⁵

Beta HCG was variable in all patients. In the study, pre-evacuation serum β -HCG was in between 1-2 lac in 40% cases, 30% had less

than 1 lac and 30% had more than 2 lac mIU/ml. Pinky's study showed serum beta HCG was more than 1 lac mIU/ml in 18.4% patients.⁸ In Ayman's study beta HCG level was variable in all patients but not less than 1 lac mIU/ml.¹⁶ 96% cases received first line treatment with suction evacuation and curettage, 4% needed laparotomy followed by hysterectomy due to uterine perforation. All the curette materials send for histopathological examination. In Ayman's study 88% patient underwent suction curettage and 3.4% need hysterectomy.¹⁶ Among the treated patients' complications occurred in some of the patients. 8 patients (16%) had incomplete evacuation, 3 patients (6%) developed shock and 2 patients (4%) had uterine perforation followed by laparotomy and hysterectomy. Follow-up was advised for all patients. In this series, 60% patients attended for regular follow-up, 18% had irregular follow-up and 22% dropped out. According to Jaglul's study, 64% had regular, 20% had irregular follow-up and 16% had dropped out.¹⁰ High dropout rate may be due to lack of education, health awareness, poor socioeconomic status, inadequate motivation and inability to understand the importance of follow-up. Among the regular follow-up (30 patients), 2 patients (6.66%) developed persistent gestational trophoblastic disease (GTD) and 28 patients (93.33%) were cured. 9 patients had irregular follow-up of which 2 patients (22.2%) develop persistent GTD. 11 patients had no follow-up and dropped out. Furthermore, 1 of the dropped-out patient latter presented with severe anemia and reparatory distress who was diagnosed as a case of choriocarcinoma and died. So, 70% patient were cured completely and 8% developed persistent GTD and 1 patient died of severe complication due to failed follow-up. Another study showed, 12% patients developed persistent GTD and 2.5% patients developed choriocarcinoma.⁹ Jaglul's study shows that 60% patient become cured, and 6% patient developed persistent mole.¹⁰ So, the result of current study is very much consistent with above studies.

CONCLUSION

Gestational trophoblastic disease (GTD) can be treated with nearly 100% cure rates especially when follow-up is adequate. Complete mole was observed most common type in this study. Serum beta HCG level are most sensitive and specific for diagnosis. Follow up of such patients is essential for early detection of malignant trophoblastic tumor. Only way to save these women is early detection, timely referred, prompt and proper treatment and regular follow up. That is only possible by raising awareness, counseling, effective follow-up programme and treatment protocol.

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