

## Molar Pregnancy Analysis of 50 Cases

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### Abstract

**Background:** A molar pregnancy is also known as hydatidiform mole which is a benign tumour that develops in the uterus. It begins when an egg is fertilized but normal viable pregnancy not occurs, rather than the placenta develops into an abnormal mass of cyst. In all cases of molar pregnancy observation is essential to detect the reawakening of chorionic activity. **Objectives:** The aim of the study was to explore the incidence, clinical presentation, management and outcome of the molar pregnancy in our hospital. **Materials & Methods:** This prospective study was conducted in Faridpur Medical College Hospital, Faridpur, Bangladesh and Bangabandhu Sheikh Mujib Medical University Hospital, Dhaka, Bangladesh. Over a period of one year from August 2005 to July 2006. 50 consecutive patients attended the out-patient's department (OPDD) of obstetrics & gynaecology and were admitted in the department of obstetrics and gynaecology of these two hospitals during this period, were taken as the study population. All pregnant women who were diagnosed as molar pregnancy were included in the study. Other necessary investigations were done if clinically indicated and to prepare the patient for anesthesia. Statistical analysis of the results was obtained by using window-based computer software devised with Statistical Packages for Social Sciences (SPSS-22). **Results:** During this period total 6550 pregnant patients and 420 patients with abortion and 85 ectopic pregnancy were admitted in both of the hospitals 50 of them were suffering from gestational trophoblastic diseases. So, incidence of gestational trophoblastic disease was 7.08 per thousand pregnancies. **Conclusion:** Results from this study showed that a small portion of patient of molar pregnancy came for routine follow up. To achieve high cure rate and low chemotherapy rate an effective registration programme and treatment protocol should be established.

**Keywords:** Hydatidiform mole, Molar pregnancy.

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## INTRODUCTION

Gestational trophoblastic neoplasm includes tumor spectrum of hydatidiform mole (complete and partial), invasive mole, placental site trophoblastic tumour and chorio-carcinoma. Among them hydatidiform mole is the most common [1]. Hydatidiform mole is an abnormal pregnancy characterized grossly by multiple grapelike vesicles, filling and distending the uterus, usually in the absence of an intact fetus. It is relatively common in Southeast Asian countries, like Bangladesh. Incidence is higher in women under 20 and over 40 yrs. of age, low socio-economic status, high parity, malnourished or debilitated by disease such as T.B and in those whose

diets are deficient in protein, folic acid and carotene. Blood group plays some role. The group-A women mated with group-A man is the least risk and the women whose blood group is AB is the greatest risk [2]. Basic pathology may be identified by three classic findings (i) oedema of the villous stroma (ii) a vascular villus (iii) nest of proliferating syncytiotrophoblast or cytotrophoblastic element surrounding villi. They elaborate a unique and characteristics tumour marker hCG. Careful monitoring of the  $\beta$ -hCG is necessary for diagnosis, treatment and follows up in all cases of trophoblastic disease. Hydatidiform mole should be suspected in any women with bleeding in the first half of pregnancy, passage of vesicle, hyperemesis gravidarum or preeclampsia-eclampsia with onset

before 24 wks. Absent fetal heart tones and a uterus too large for the estimated duration of gestation on physical examination support the diagnosis. USG and serial  $\beta$ -hCG determinations are necessary to establish a firm diagnosis of hydatidiform mole. When the diagnosis has been confirmed, molar pregnancy should be terminated. Suctions curratage is the method of choice. Hydatidiform mole must always be regarded as potentially malignant condition. About half of all cases of chorio-carcinoma, the antecedent gestrational even is hydatidiform mole. So, post evacuation close follow up with serial B-hCG titre is essential for every patients of molar pregnancy. This trophoblastic disease has got a wide range complication. With the modern medical facilities these can be detected early and can be properly managed. If not managed timely and properly which may endanger the life of a mother. So, aim of my study is actual diagnosis, follow up and to evaluate the incidence of complication of molar pregnancy and also evaluation of management.

## OBJECTIVE

The aim of the study was to explore the incidence, clinical presentation, management and outcome of the molar pregnancy in our hospital.

## METHODS

This prospective study was conducted in Faridpur Medical College Hospital, Faridpur, Bangladesh and Bangabandhu Sheikh Mujib Medical University Hospital, Dhaka, Bangladesh. Over a period of one year from August 2005 to July 2006. 50 consecutive patients attended the out-patient's department (OPDD) of obstetrics & gynaecology and were admitted in the department of obstetrics and

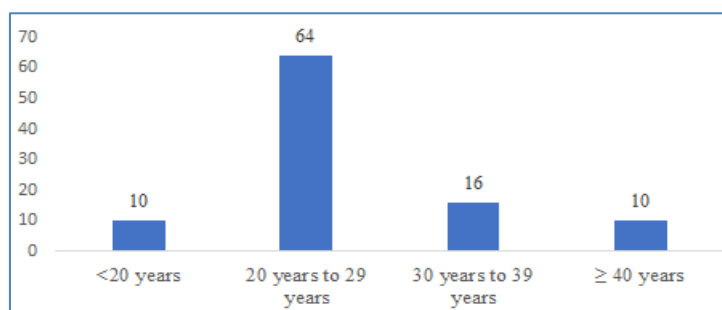
gynaecology of these two hospitals during this period, were taken as the study population. All pregnant women who were diagnosed as molar pregnancy were included in the study. Follow up of the patients was done for one year. Other necessary investigations were done if clinically indicated and to prepare the patient for anesthesia. Statistical analysis of the results was obtained by using window-based computer software devised with Statistical Packages for Social Sciences (SPSS-22).

## RESULTS

During this period total 6550 pregnant patients and 420 patients with abortion and 85 ectopic pregnancy were admitted in both of the hospitals 50 of them were suffering from gestational trophoblastic diseases. So, incidence of gestrational trophoblastic disease was 7.08 per thousand pregnancies. 64% patients were between 20-29 years of age and only 10% were above 40 years mean age of the patients. 30% of the patients were multiparous and 52% patients were low parity and 18% grand multipara. In patients with GTD 60% presented with P/V bleeding and amenorrhoea as the only symptom, it was associated with passage of vesicles in 20% patients and lower abdominal pain 12% patients, 4% patients came with amenorrhoea along with exaggerated S/S of pregnancy 4% present with P/V bleeding with vaginal nodules. In this study all patients were diagnosed with a clinical suspicion, in 60% of molar pregnancy diagnosis were confirmed by USG in 30% both serum  $\beta$ -hCG and USG were done. In 10% patients of molar pregnancy there was no available USG of  $\beta$ -hCG report and histopathology done in all pppatients.

**Table-I: Incidence of molar pregnancy (n=50)**

Total obstetric admission (Includes early pregnancy complication)	Number of patients with gestational trophoblastic diseases	Incidence
7055	50	7.08 (Per Thousand Pregnancies)



**Fig-I: Age Distribution of molar pregnancy**

**Table-II: Parity distribution of molar pregnancy (n=50)**

Parity	n=50	%
Multiparous	15	30.0
1-3	26	52

4-10	9	18
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**Table-III: Clinical presentation of the cases (n=50)**

Presenting Symptoms	n=50	%
Amenorrhoea and vaginal bleeding	30	60.0
Vaginal bleeding with passage of vascles	9	18
Vaginal bleeding with other (Pain abdomen fever)	3	6
Amenorrhoea with exaggerated S/S of pregnancy	7	14
Bleeding with raised BP	1	2

## DISCUSSION

During August 2005 to July 2006 total 6550 pregnant patients, 420 abortion, 85 ectopic pregnancy, 50 hydatidiform mole were admitted at both FMCH and BSMMU. The incidence of molar pregnancy was 7.08 per thousand pregnancies e.g., 1 in 141 pregnancies. Study by Akhter Sayeba (1978-80) at SSMC and Mitford hospital showed that incidence of molar pregnancy was 1 in 144 deliveries e.g., 6.9 per thousand pregnancies [3]. From another study by Khatoon RA 1993 in DMCH it was found that incidence of molar pregnancy was 1 in 107 e.g., 9.3 per thousand pregnancies [4]. Study by T. Mun Gan E. KUSCU 1996 [5] showed a much lower incidence 1.84 per thousand pregnancies. Another study in India by T. Reddy and K. Rajeswari during 1989-91 showed an incidence of 4.08 per thousand 25 pregnancies. In this study maximum number of patients (64%) was in 20-29 years age group. A study by Khatoon RA in 1993 at DMCH showed that 63.75% patients were in 21-30 years age group [4]. Another study of 287 patient was done in Pusan, Korea [7]. Which showed highest (70%) patients were below 30 years of age? In a study of 38 cases from the Department of Obstetrics and Gynaecology, Pennsylvania Hospital was done. In this series maximum (600/0) patient being between 20-30 years. In Novae series 60% patients were between 20-30 years and 8% over 40 years. In this study, a large percentage (64%) occurred between 20-29 years. Findings of this study are comparable of the previous observations. Early marriage and higher birth rate are probably responsible for the high incidence of this age group. But with a small group study exact valid conclusion would be difficult. A study of 347 patients from North Carolina, USA, showed that there was an increase in the incidence of molar pregnancies in older age group but no increase incidence among teenagers [8]. Study in Italy, Greenland, China Japan, Britain and the United States all suggested an increased risk in women over the age of 35 with a further fivefold increase beyond the age of 40 [9]. In present series most of the patients 50% were multipara.

A study of 327 patients by Curry S.L. from North Carolina, USA showed that 89% had abnormal uterine bleeding, 12% developed preeclampsia. So, it differs to some extent with my studies. It may be due to small number of patients. In this series 70% patient was

treated by suction evacuation. 24% by D & C and 6% suction evacuation followed by total abdominal hysterectomy. Patient no longer desires to preserve fertility; hysterectomy may be performed ideally with mole in situ. The likely hood of post molar trophoblastic diseases increases with age and hysterectomy eliminates 80-90% of that risk of which 15% due to non-metastatic trophoblastic disease. Follow up was done by clinical examination, serum  $\beta$ -hCG, X-ray chest and USG (indicated cases) for a period of 1 year. In these series 35 (70%) patients of GTDs attended for-regular follow-up. In Boston, USA all patients came for regular follow-up []. In Ankara Turkey (1996) 100% patients came for regular follow-up which differ from other studies probably because of their poor socioeconomic condition, lack of education and health awareness [5]. 30 patients were spontaneously cured from the disease by 6-8 weeks. 8.55% developed persistent mole, which was evidenced by persistently raised or increasing or plateau of 0-hCG and 5.7% developed choriocarcinoma, which was evidenced by presence of vaginal and pulmonary metastatic deposits, increasing or plateau of 0-bCG and positive histopathology. In Boston 23% patients developed persistent trophoblastic disease [8] and in Ankara Turkey (1996) 14.5% patients were diagnosed as persistent molar disease [5].

In this series most (80%) patients had uterus greater than period of gestation, April Gale 'O' Quinn<sup>1</sup>-stated that about 50% patients have excessive uterine size for gestational period which was compatible with other studies regarding size of the uterus. Study by Soto Wright- V [9] Gerne did not support the evidence where excessive uterine size was present in 28% and 15% patients respectively. Out of 50 patients, maximum 40% patients came at 12-16 weeks of gestation at the time of admission. In the present study diagnosis was confirmed by USG (60% cases) and pre-evacuation serum  $\beta$ -hCG (20% patients). Histopathology was done in all patients. In this series most of the patients (80%) had hemoglobin level between 6.5-9.9 mg/d. In a study from the department of Gynaecology and Obstetrics Pennsylvania Hospital showed 58% were below 10.9 g/dl and managed by several units of blood transfusion. In 52% patient's ovary was palpably enlarged. Most of the patients (80%) in this series came with hemorrhage as the immediate complication. Among them 12%

present presented with shock, no patients had developed preeclampsia.

### LIMITATION OF THE STUDY

This was an observational study with a small sized sample. So, the findings of this study may not reflect the exact scenario of the whole country.

### CONCLUSION

Results from this study showed that a small portion of patient of molar pregnancy came for routine follow up. To achieve high cure rate and low chemotherapy rate an effective registration programme and treatment protocol should be established.

### RECOMMENDATION

This study can serve as a pilot to a much larger research involving multiple centers that can provide a nationwide picture, validate regression models proposed in this study for future use and emphasize points to ensure better management and adherence.

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