

HYDATIDIFORM MOLE: A STUDY OF 90 CASES

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هدف الدراسة: الهدف من الدراسة هو تحديد نسبة حدوث الحمل العنقودي وتحديد العوامل الرئيسية المؤدية إلى حدوثه وطرق التشخيص والمشاكل المصاحبة وطرق العلاج في مستشفى الملك فهد الجامعي بالخبر .

طريقة الدراسة: دراسة استنباطية أجريت خلال فترة خمس عشرة سنة من شهر مايو (أيار) 1983م وحتى شهر مايو (أيار) 1998م كل الحالات ومجموعها تسعون حالة تمت دراستها وتحليلها من حيث العمر وعدد مرات الحمل والأعراض والمضاعفات وطرق العلاج والمتابعة .

نتائج الدراسة: أظهرت الدراسة أن معدل الحمل العنقودي كان (2,2 في الألف) وتزداد نسبة حدوثه مع تقدم السن وتعدد الحمل .

إن من أهم أعراض الحمل العنقودي هو النزيف المهبطي وحدث في 18 حالة (90%) فقر الدم في 46 حالة (51%) والغثيان في 26 حالة (29%) ، وحجم الرحم أكبر من عدد أسابيع الحمل في 56 حالة (62%) وتضخم المبايض في 24 حالة (27%) .

إن من المضاعفات المصاحبة للحمل العنقودي هي النزيف الرحمي في 19 حالة (27%) ، الانتان في 19 حالة وانتشار المرض داخل جدار الرحم والجسم في 9 حالات (10%) .

كانت المضاعفات أكثر شيوعاً في الحالات التي راجعت المستشفى كانت هناك 6 حالات (7,6%) لحمل عنقودي غاز وثلاث حالات (3,3%) تحولت لسرطان خلال هذه الدراسة .

الخلاصة: بناء على هذه الدراسة يمكن القول إن نسبة حصول الحمل العنقودي مشابهة لمثيلاتها في دول الشرق ، ويمكن أن يؤدي التشخيص المبكر والمعالجة المبكرة إلى إنقاص نسبة المضاعفات التي لوحظت في هذه الدراسة ، ولذا نوصي النساء الحوامل بضرورة مراجعة الطبيب عند حدوث نزيف أو غثيان أثناء الحمل .

الكلمات المرجعية: الحمل العنقودي ، المضاعفات .

Objectives: To determine the incidence, epidemiology, complications and management of Hydatidiform mole (HM) at the King Fahd Hospital of the University (KFHU), Al-Khobar, Saudi Arabia.

Methods: A retrospective study was conducted covering a period of 15 years from May 1983 to May 1998. There were 90 cases of hydatidiform mole. The details of maternal characteristics, clinical presentation, tumor behavior, management and complication were studied.

Results: There were 40,700 deliveries during the study period giving an incidence of hydatidiform mole (HM) of 2.2/1000 deliveries. The most common clinical feature was vaginal bleeding which was noted in 81 (90%) cases. Fifty-six (62%) cases had uterus larger than dates, while in 12 (13%) cases, the uterine size was smaller than dates. Ovarian enlargement was noted in 24 (27%) cases. Complications in the form of hemorrhage occurred in 19 (21%) cases and 9 (10%) cases were complicated by

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cated by sepsis. The complications were more common in patients presenting late to the hospital. There were 6 (6.7%) cases of invasive mole and 3 (3.3%) cases of choriocarcinoma during the follow-ups of the study group.

Conclusion: On the basis of this study, the incidence of hydatidiform mole is comparable to the incidence in some oriental countries. Earlier diagnosis and treatment of HM will probably result in the decrease of complications found in this study.

Key Words: Hydatidiform mole (HM) complication.

INTRODUCTION

For reasons not well understood, the incidence of hydatidiform mole (HM) varies greatly in different parts of the world. The highest rates are reported in the Far East where the decrease is 7 to 8 times more common than the west.^{1,2}

The purpose of this study was to explore the incidence and epidemiological correlates of HM, the clinical behavior, the complications and management of this disease in our hospital. The details of the records of 90 patients with HM seen and managed at the KFHU, Al-Khobar, Saudi Arabia from May 1983 to May 1998 were reviewed.

MATERIAL AND METHODS

During the study period, there were 90 cases of HM. Most of the patients admitted with HM were initially diagnosed as threatened abortion. The diagnosis of HM was based on a pelvic ultrasound scan, quantitative estimation of serum beta human chorionic gonadotrophin (BhCG) and histopathological examination of the specimen. During this period 40,700 patients delivered in our hospital.

Ninety-six percent of the patients in the study groups were Saudis. The details of maternal characteristics, clinical presentation, management and complications of the condition were noted from the case records. The patients were followed up for period between 8 months to 2 years after treatment. A quantitative serum BhCG was carried out by the Amerlex-M radioimmunoassay kits.

RESULTS

There were 40,700 deliveries during the period giving an incidence of HM as one in 452 deliveries.

Table 1 shows the age distribution of the patients. The patients' ages ranged from 16 to 45 years with a mean of 28.9 years. HM occurred more in the age group 21-35 years, was lowest in patients below 20 years and increased steadily thereafter.

Table 1: Age distribution of patients with hydatidiform mole

Age (years)	Hydatidiform mole (N=90) No. (%)
≥ 20	5 (5.6)
21 – 25	17 (18.9)
26 – 30	21 (23.3)
31 – 35	23 (25.6)
> 35	24 (26.7)

Table 2 shows the parity distribution of the patients. The parity of the patients ranged from 0 to 9 with a mean of 3.1. HM was low in nulliparous as compared to the parous patients.

Table 3 shows the prominent clinical features of HM. Vaginal bleeding occurred in 81 (90%) cases, disparity between uterine size and period of gestation in 56 (62%) cases, anemia in 46 (51%) cases, hyperemesis gravidarum in 26 (29%) cases and ovarian enlargement in 24 (27%) cases.

Table 4 shows the complication of HM. Moderate to severe hemorrhage occurred in 10 (21%) cases. Twelve (13.3%) patients

Table 2: Parity distribution of patients with hydatidiform mole

Age (years)	Hydatidiform mole (N=90)
0	6 (6.7)
1	10 (11.1)
2	16 (17.8)
3	21 (23.3)
4	17 (18.9)
≥	20 (22.2)
Total	90 (100)

aborted the mole spontaneously, followed by an evacuation of the uterus, while in 78 (87%) patients, the uterus was evacuated by suction curettage. Two patients aged 43 years, para 8 and aged 38 years, para 6, required hysterectomy as a life saving procedure on account of uncontrollable hemorrhage during evacuation, while a third patient underwent laparotomy as a result of perforation of the uterus to repair the tear. Sepsis complicated HM in 9 (10%) cases and all the patients were found to be incompletely evacuated.

During the follow-up, invasive mole was diagnosed in 6 (6.7%) cases based on pelvic ultrasound and persistently high serum BhCG levels after evacuation of uterus. Three patients (3.3%) developed choriocarcinoma. All these patients had a history of intermittent vaginal bleeding and presented late to the hospital. The diagnosis was confirmed histologically by a biopsy of a metastatic vaginal nodule in one patient and endometrial curettings in two patients. Pulmonary metastasis was also present in two patients with choriocarcinoma. All these patients were treated with chemotherapy and are alive and well. There was no maternal death in this series.

All the patients of HM were routinely followed by a quantitative estimation of serum BhCG and ultrasonic scanning. These patients were advised to avoid pregnancy until BcHG levels had become normal and remained normal for at least 6 months.

Combined oral contraceptive pills were prescribed to them as a method of birth control.

Table 3: Clinical features of Hydatidiform Mole (N=90)

Presenting feature	No. of cases (%)
Bleeding per vaginum	81 (90)
Hyperemesis gravidarum	26 (28.9)
Anemia	46 (51.1)
Pregnancy associated hypertension	11 (12.2)
Thyrotoxicosis	3 (3.3)
Uterine size:	
Larger than the dates	56 (62.2)
Smaller than the dates	12 (13.3)
Compatible with the dates	23 (25.6)
Ovarian enlargement	24 (26.7)

Table 4: Complications of Hydatidiform Mole (N=90)

Complications	No. of cases (%)
Hemorrhage	19 (21.1)
Sepsis	9 (10.0)
Thyrotoxicosis	3 (3.3)
Invasive mole	6 (6.71)
Choriocarcinoma	3 (3.3)

DISCUSSION

The incidence of hydatidiform mole (HM) in this series corroborates the reports from some oriental countries.^{3,4} The true incidence in the population may be even lower than this hospital-based study, since KFHU functions as both a general and a specialist hospital with a bias in favor of the admission of complicated and abnormal cases. The incidence of invasive mole after hydatidiform mole has been reported as fluctuating between 5.8% and 3.1%.³ Choriocarcinoma could develop after antecedent normal pregnancy, abortion and hydatidiform mole. However, 25% of the cases of choriocarcinoma follow the hydatidiform mole, and with adequate follow-up of molar pregnancy, there is a de-

crease in the incidence of choriocarcinoma after hydatidiform mole.³

Hydatidiform mole (HM) varies greatly in incidence around the world and this is due to the fact that many reports lack a clear, and precise definition of the disease, over-reporting of pregnancies with gestational trophoblastic disease and different denominators used in different published series.

Sixty-eight percent of the patients in the study were in their second and third decades of life, the period of maximum fertility. As the data on maternal age and parity for all the mothers delivered during the same period of time was not available, it was not possible to calculate the incidence of hydatidiform mole the different age and parity groups. However, some studies indicate an increase in the incidence of HM with decreasing maternal age below 20 years,⁵⁻⁸ while others report an increased risk in patients over 35 years.⁹⁻¹¹ Early marriage and teenage pregnancy are the norm in Saudi women and child bearing often continues into the later years of reproductive life. It is relevant to note that the number of HM analyzed in this report was rather small and this may have affected the results.

Vaginal bleeding occurred in 90% of our patients, anemia occurred in 51%, hyperemesis gravidarum occurred in 29%, uterine enlargement beyond that expected for the gestational age was seen in 62% of cases, uterine size was small for dates in 12% of cases, ovarian enlargement occurred in 27% of cases, bilateral in 72% and unilateral in 28% of cases. Our findings are similar to corresponding figures reported in other series.¹³⁻¹⁶

Pregnancy induced hypertension occurred in 12% of cases which is less than the figure reported in other series.¹³⁻¹⁶ The possible explanation for the differing incidence of pre-eclampsia in different studies could be related to the timing of the diagnosis of molar pregnancy. Molar pregnancy is diag-

nosed and managed earlier now because of the routine use of ultrasonic scanning in all pregnant patients.

Clinical hyperthyroidism was noted in 3% of the cases and these patients received beta-adrenergic blocker prior to the molar evacuation. Nisulaard Talidourous (1980) suggested that human chorionic gonadotrophin is the thyroid stimulator in patients with hydatidiform mole.¹⁷ Soto-Wright et al (1995) postulated that the clinical presentation of complete hydatidiform mole has changed in recent years and fewer current patients in their study as compared to historic control presented with traditional symptoms of molar pregnancy (large uterine size, hyperemesis gravidarum, anemia, pre-eclampsia, and hyperthyroidism).¹⁸ However, vaginal bleeding remained the most common symptom with no significant change in the incidence of persistent trophoblastic tumour. The incidence of invasive mole and choriocarcinoma in this study was 6.7% and 3.3%. Chemotherapy is now the established method of treatment of choriocarcinoma and hysterectomy and surgical resection of the tumor is rarely required in cases resistant to chemotherapy.^{19,20} It is often difficult clinically to distinguish between an invasive mole and choriocarcinoma without histological examination of the tissue. The interval between evacuation of the mole and detection of post-molar gestational trophoblastic disease in these patients ranged from 2 to 12 months (mean 6 months). All patients with evidence of persistent trophoblastic activity in the absence of a new pregnancy should receive chemotherapy.

The combined oral contraceptive pill was the commonly prescribed method of contraception for at least one year.

The availability of ultrasound scans and estimation of serum BhCG contributed to the early diagnosis and follow-up of these patients.

CONCLUSION

The incidence of hydatidiform mole in this study is comparable to the incidence in some far eastern countries. The common clinical features of hydatidiform mole noted were vaginal bleeding in early pregnancy, uterine size being larger than the dates and the presence of ovarian thecalutein cysts. When a patient presents with symptoms of pregnancy in an exaggerated form specially hyperemesis gravidarum the clinician should be alerted to the presence of gestational trophoblastic disease. However, due to the frequent use of ultrasonic scan, the diagnosis of hydatidiform mole is now made early in pregnancy. If hydatidiform mole is suspected on clinical grounds, ultrasonic scanning and quantitative estimation of serum BhCG should be carried out to confirm the diagnosis.

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