THE VALUE OF ENDOMETRIAL CURETTAGE IN PERSISTENT TROPHOBLASTIC DISEASE

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ABSTRACT

There is a tendency to perform curettage in the follow up of hydatidiform mole either to arrest bleeding or obtain a histological proof of malignancy. In 46 patients developing trophoblastic neoplasia after molar evacuation 36 underwent one or more endometrial curettage. However in only one case curettage showed histologically choriocarcinoma. Serum Beta hCG values showed no correlation to the histological report of curettage. It is demonstrated that development of malignancy after hydatidiform mole is rarely proved by endometrial curettage. It is possible to limit use of curettage with investigations like Beta hCG and ultrasonography.

INTRODUCTION

Hydatidiform mole occurs with an incidence of about 1:2000 or 3000 pregnancies in Western countries and 1:200 or 300 in Asia (Buxton 1959). In India a frequency of the order of 1 in 409 in Delhi (Vohra & Madan 1970) to 1 in 228 deliveries in Madras (Vijayalaxmi & Thangadavelu 1972) has been reported. Follow up of a case of hydatidiform mole after evacuation or hysterectomy is of vital importance. Malignancy in the form of invasive mole or choriocarcinoma may develop in patients left without follow-up. Measurement of tumour marker serum hCG (S-hCG), is the most important follow-up investigation. With a good follow up one can detect choriocarcinoma in its early stage wherein one can expect 100 percent cure by primary chemotherapy alone.

The Department of Obstetrics & Gynaecology, Kasturba Medical College Hospital, Manipal, is one of major referal centre for trophoblastic disease in Karnataka. It was noted that on referral many patients in the work up of hydatidiform mole had undergone one or more endometrial curettages. Some of these curettages were done to obtain a histopathological diagnosis of malignant disease before referring the patient for further evaluation and treatment.

This study was undertaken to assess the value of endometrial curettage in the follow up of patients with a diagnosis of hydatidiform mole.

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MATERIAL & METHOD

Forty-six patients were treated from January 1987 to July 1989 at the Department of Obstetrics & Gynaecology, Kasturba Medical College Hospital, Manipal, because of GTN developing after a molar evacuation. These patients were between age group of 16 and 48 years and their parity ranged from 0 to 6. All 46 patients had persistent trophoblastic activity evident from the high level of serum B(Beta) hCG. Improper involution of the uterus and ovaries evident from the size of the uterus and ovaries also gave an indication of persistent trophoblastic activity. A pelvic ultrasound and X-ray chest were done in all cases for follow up.

Thirty-six of these cases underwent repeat D & C. This was performed either because of persistent bleeding or for suspicion of retained trophoblastic tissue in an enlarged uterus. In two cases D&C was done twice because of persistant bleeding. The pathological material from the endometrial curettage was examined by the pathologist at the Kasturba Medical College Hospital, Manipal.

RESULTS

The various indications of repeat D&C in patient with hydatidiform mole follow up is given in Table I.

TABLE I

Indications for repeated D&C

	No. of Operations N = 38	No. of Patients N = 36
Heavy bleeding	8	7
Retained Tissue	10	10
B hCG value indicating Neoplasia	20	19

Majority of cases, i.e. 19(52.7%) underwent D&C due to high Beta hCG value indicating neoplasm. One patient underwent D&C twice. A patient with heavy bleeding also underwent D&C twice. In all 38 curettages were done for 36 patients.

The various pathological findings of the 38 curettages are presented in Table II.

TABLE II

Pathological findings at repeated D&C in patients with Hydatidiform mole (N = 38)

Pathological Findings	No. of Operations
Choriocarcinoma	1
Suspicion of maligant Trophoblastic Neoplasia	2
Trophoblastic Tissue without suspicion of malignancy	19
No remnants of trophoblastic tissue	16

It can be seen from Table II that in only one case the diagnosis of choriocarcinoma was established by D&C. In two cases malignancy could not be ruled out. In 35 out of 38 specimens (92%) the pathologist could not find any histological support for the diagnosis of malignant trophoblastic tissue. In two cases with two repeat D&C no malignancy was revealed.

The level of serum Beta hCG in the patients who underwent D&C is given in Table III. This table gives the range of serum Beta hCG levels in patients as per the pathological specimen report of D&C.

TABLE III

Serum Beta hCG Report in various D&C Reports (N = 36)

Pathological Findings at D&C	No. of Patients	B hCG Value Range
Choriocarcinoma	1	60,000 miu/ml
Suspicision of malignant Trophoblastic Neoplasia	2	6000-45000 miu/ml
Trophoblastic tissue without Suspicion of malignancy	19	2500- 42000 miu/ml
No remnant of Trophoblastic tissue	14	3000-35000 miu/ml

It can be seen that serum Beta hCG value bears no relation to the pretreatment curettage report. In 14 cases where no remnant of trophoblastic tissue was seen on D&C, Beta hCG ranged from 3000- 35000 miu/ml. Two out of these 14 cases had in fact pulmonary metastasis. When D&C revealed only trophoblastic tissue without suspicion of malignancy two cases had Beta hCG value above 40,000 miu/ml and pulmonary metastasis strongly suggestive of malignancy.

DISCUSSION

Following a molar pregnancy the trophoblastic disease may persist as a residual mole; invasive mole or as choriocarcinoma. The risk of choriocarcinoma after hydatidiform mole is estimated to be 3- 5% increasing with age and parity (Goldstein 1977, Lewis 1980).

Invasive mole is characterised by deep trophoblastic penetration into uterine wall or the occurence of metastasis or both. It is almost impossible to obtain a diagnosis of invasive mole from endometrial curettage, because even if myometrium is identified in specimens from D&C it is hard to prove deep infiltration.

Although choriocarcinoma was diagnosed in only one of our case by curettage there was ample evidence to suggest that choriocarcinoma was present in more than one case. In two out of 14 cases (14%) where no remnant of trophoblastic tissue was found on D&C, Beta hCG values were more than 30,000 miu/ml and showed multiple pulmonary metastasis. These patients underwent remission with multiple drug chemotherapy (MAC regime). In two cases out of 19 (10.5%) where D&C revealed only trophoblastic tissue without suspicion of malignancy serum Beta hCG levels were more than 40,000 miu/ml and pulmonary metastasis strongly suggestive of malignancy were seen. One of these patients underwent adjuvant hysterectomy during the treatment and histopathological specimen revealed choriocarcinoma.

In a study by Flam and Lundstorm (1988) in 24 patients of GTN following molar evacuation, in only one patient (4%) choriocarcinoma was diagnosed by curettage. However other investigations like serum hCG suggested that choriocarcinoma was present in more than one case. In a study of 37 patients by Berkowitz et al (1980) pretreatment curettage revealed no trophoblastic tissue in 27 (54%) cases. One of these patient had pulmonary metastasis.

One reason for not obtaining proof from a curettage could be deep infiltration in the myometrium or else it might be minimal superficial growth of tumour missed by the curettage.

D&C to arrest bleeding in patients with GTN following molar evacuation also seems to have limited role. Multiple curettages do not reduce the risk of persisting disease. Flam and Landstrom (1988) used ergotamine as primary medical therapy to arrest bleeding. Intramuscular prostaglandins 15 methyl PGF2 alpha was used if bleeding continued inspite of ergotamine. Curettage thus can be restricted to patients with persistent bleeding inspite of this treatment. Persistent bleeding may be due to retained molar

tissue (residual mole) and if this is demonstrated by ultrasonography, D&C may be advantageous in such cases.

CONCLUSION

The limitation of D&C in the follow up of hydatidiform mole are to be recognised. It offers very little help to obtain a diagnosis of malignancy after evacuation of hydatidiform mole. If D&C report is relied on to exclude malignancy in many cases treatment may be delayed on a false assumption of no malignancy. Again the risk of uterine perforation by D&C need not be emphasized. This study shows that the decision to institute chemotherapy in a patient who has hydatidiform mole must basically rely on Serum Beta hCG.

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