

# INVASIVE HYDATIDIFORM MOLE

(Report of 5 Cases)

by

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## Introduction

The invasive hydatidiform mole occupies an intermediate position between benign hydatidiform mole and highly malignant choriocarcinoma. This condition is also known as destructive mole, penetrating mole, malignant hydatidiform mole and chorioadenoma destruens. The term chorioadenoma destruens was applied by Ewing, but it seems to be misnomer, because the term chorioadenoma was applied to it due to the supposed analogy of the chorionic villi with glands. But histopathologically it is not like that. A better term, therefore, is invasive hydatidiform mole. It has been claimed by many workers that the incidence of invasive mole is very uncommon. In recent report from Sweden by Ringertz (1970) it has been mentioned that 3.5% of moles progress to invasive mole or chorio-carcinoma. But, just like the incidence of hydatidiform mole, the incidence of invasive mole also seems to be very high in our country. Very recently, Chakraborty *et al* (1976) from N.R.S. Medical College has reported 4 cases of malignant mole in 2 years. In present

paper we are presenting 5 cases (from Sept. 1974 to Dec. 1976) of invasive mole.

## Case 1

Sm. D. 22 years, married for 3 years, was admitted on 20-9-74 with the complaints of irregular bleeding per vaginam and profuse haemoptysis for 2 weeks. There was history of evacuation of hydatidiform mole 4 months back. This was her first pregnancy. She was on oral tablets for 2 years before pregnancy.

On examination, general condition was very low. Pallor ++ (Hb-4.5 gm%) P/R 136/38/min. B.P.—90/60 mm. of Hg. Per abdomen, uterus just felt above symphysis pubis. Per vaginam, uterus found enlarged about 12-14 weeks size of pregnancy. Right ovary was cystic and enlarged to size of an orange. Left ovary was also cystic but just palpable. Os closed. No bleeding seen. Patient had X-ray chest done outside which showed, metastasis in lung fields on both sides. Patient was treated with blood transfusion, antibiotics, O<sub>2</sub>, and sedation. But she had repeated attacks of haemoptysis for the next 7 days, Urine for HCG was negative on repeated examination. After seven days when the general condition slightly improved curettage was done. Under anaesthesia a growth originating from the anterior wall of uterus, very firm in feel, was detected. The curettage report showed no signs of any molar tissue. Urine examination after 5 weeks of admission showed positive result. Patient was prepared for laparotomy and if necessary hysterectomy. But the patient refused to give consent for hysterectomy. The patient was discharged on risk bond. From personal communication it was known that the patient was admitted in Calcutta Hospital under Dr. G. C. Nundy and was treated with

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methotrexate and local excision of the lump, which was found to be invasive mole. The patient is well upto now.

#### Case 2

Sm. A. 20 years, married for 2 years was admitted on 7-2-76 in a very low poor general condition. She had evacuation of a molar pregnancy on 30-8-75 followed by curettage on 19-9-75 in Coochbehar District Hospital. During pregnancy she had 2 bouts of haemoptysis. Patient had amenorrhoea for about 3 months after evacuation. On 25-1-76 she was readmitted to the same hospital with history of acute abdominal pain, vomiting and slight vaginal bleeding. Laparotomy was performed on 27-1-76. Uterus was found perforated at fundus and some chorionic villi like tissue was found surrounding the area. Peritoneal cavity was full of blood clots. Repair of the wound was done. No tissue was sent for histopathological examination. On admission, P/R 120/34/min. Pallor + + Hb—4.6 gm% B.P.—110/70 mm of Hg. Uterus was felt per abdomen. Abdominal wound was healing well.

On vaginal examination there was no bleeding. Uterus was about 16 weeks' size of pregnancy. Ovaries were not palpable. Urine test for Gonadotrophin hormone was positive 1 in 100 dilution. In 200 dilution it was negative. Patient was treated with repeated blood transfusion and methotrexate 5 mg. three times daily for 5 days. On 13-2-76 suction evacuation was done without anaesthesia and material was sent for histopathological examination. The report was, no evidence of hydatidiform mole or chorionepithelioma. Chest X-ray showed no abnormality. Patient was kept in hospital till 9-3-76. Two courses of methotrexate were given in the mean time. Repeat urine examination showed the following results.

- On 9-2-76 — 1 in 100 dilution positive.  
1 in 200 dilution negative.
- 19-2-76 — 1 in 10 dilution positive.  
1 in 100 dilution negative.
- 27-2-76 — Qualitative test positive.  
Quantitative 1 in 10 dilution negative.
- 5-3-76 — Urine for Male toad test negative.
- 6-3-76 — Biological test for serum positive.

Follow-up Examination: 20-3-76—Follow up

examination—blood serum gonadotrophin negative.

24-4-76 — Urine negative.

During follow up no abnormalities were detected. Patient gained weight: Hb.—11 G% Uterus was normal in size.

#### Case 3

Sm. A. 25 years, P<sub>1</sub> + 1 was admitted on 16-4-76, in a very poor condition with complaints of vaginal bleeding since 23rd March, 1976. Severe pain in the abdomen and respiratory distress was present for 3 days. She had evacuation of hydatidiform mole 3 months back. After that there was amenorrhoea for 1½ months which was followed by vaginal bleeding. On examination general condition was very poor, pallor + + (Hb.—4.8 G%) P/R 124/42/min. B.P. 118/72 mm of Hg. There was extreme tenderness all over the abdomen. On vaginal examination uterus just bulky. Os—closed. Bilateral cystic ovaries were felt. There was slight blood stained discharge. Since general condition of the patient was very poor, she was treated with blood transfusion, oxygen sedation and antibiotics for 48 hours. On 18-4-76, since there was no improvement of the condition, laparotomy done. Peritoneal cavity was found full of blood. Uterus was bulky about 10 weeks' size with ovaries of normal size. Perforating moles at left cornu which was bleeding actively and also at surrounding areas were seen perforating through lower anterior surface of corpus. Scattered molar tissues were found over intestines. Organised blood clots were also found scattered throughout peritoneal cavity. Total hysterectomy with bilateral salpingo oophorectomy was done. On cut section growth was found inside uterine cavity. During post-operative period, there was distension of abdomen. Patient had 6 bottles of blood transfusion. Methotrexate was started from the day of the operation. Urine report for HCG on 17-4-76—positive in 1 in 100 dilution, but negative in 1 in 200 dilution.

Chest X-ray showed no abnormalities. No history of haemoptysis present. Urine for male toad test on 30-4-76 showed negative result.

#### Case 4

Sm. S. 45 years, P<sub>7</sub> + 3, was admitted on 17-1-76 with the history of amenorrhoea for 3 months and vaginal bleeding for the last 7 days.

On examination, general condition was poor, pallor + + B.P.—160/60 mmHg. Per abdomen—Uterus was 24 weeks' size. On vaginal examination, os was open, vesicular mole seen through Os. Evacuation was done after starting I.V. syntocinon. On 23-1-76 since there was high temperature and pus like vaginal discharge; dilatation of cervix was done when frank pus came out. The pus drained out of uterus and antibiotics were continued. Since, there was no bleeding, the patient was discharged on 27-1-76 with advice to come after 4 weeks for hysterectomy. Urine for rat test was negative at time of discharge. Patient was readmitted on 10-4-76 for hysterectomy. On 20-4-76 total abdominal hysterectomy with bilateral salpingo oophorectomy was done. On opening the abdomen two nodules were found, one on the anterior surface and another on the posterior surface of the uterus. Excessive congestion found in the pelvis while removing the uterus. Tubes and ovaries were normal looking. On macroscopical examination of the specimen it was found that the uterine wall was invaded by small vesicles just beneath the region of the nodules. Cavity was empty. During the post-operative period, methotrexate 5 mg. TDS was started. Urine for rat test after operation was positive. Postoperative period of the patient was uneventful. Urine for male toad test on 1-5-76 showed negative result.

#### Case 5

Smt. C. 24 years, P<sub>1</sub> + 0 was admitted on 9-11-76 with bleeding per vaginam for about 2 weeks, severe pain in the abdomen for last two days and fainting attacks. She had an evacuation of hydatidiform mole about 5 weeks back while she was carrying 16 weeks. General condition was fair, but patient was quite pale and restless. P/R: 120/20/min. B.P.—118/80 mmHg. Per abdomen—lower abdomen was extremely tender. Soft irregular lump felt on left side of lower abdomen. Slight distension was present. On vaginal examination uterus was bulky and a lump 3" x 3" size was felt attached to the uterus through left fornix. Fornices were extremely tender. Provisional diagnosis of old pelvic haematocoele was made and laparotomy was decided. On opening the abdomen uterus was perforated on anterior wall and molar tissue had collected into peritoneal cavity. There was a hematoma extending into left broad ligament. Total hysterectomy was done. There

was some difficulty in stopping the bleeding from the broad ligament haematoma site. Patient developed shock during immediate postoperative period which was controlled with massive blood transfusion and cortisones. Inj. methotrexate was started during postoperative period. Patient developed toxic manifestations in the form of nausea vomiting, etc. Hb% was 5 G% and total W.B.C. count came down to 2000/cm. Therefore, methotrexate was stopped after first course. Patient developed secondary haemorrhage thrice during postoperative period and was discharged on 12-1-77. Twelve bottles of transfusion were given. Urine report for H.C.G. was negative after 13 days of operation. It was positive 1 in 128 dilution after 4 days. Histopathological report showed perforating molar tissues into myometrium of uterus.

#### Discussion

Five different clinical types of cases of invasive mole have been described here. In case 1 main symptom was haemoptysis. In case 2 the patient was operated outside and during admission her main complaints were pain in abdomen and slight bleeding per vaginam. In case 3 and in case 5 the patients were admitted in a very serious condition with clinical signs and symptoms of internal haemorrhage and in case 4 the patient had no symptoms. The case was accidentally diagnosed during hysterectomy.

Paranjothy (1970) has observed that average age incidence of invasive mole is around 30 and average gravidity is 3 and over. In the present series in 3 cases age was within 25 years and in one case it was 45. Thus the present series shows extremes of age and specially patients of very young age are prone to develop invasive mole. Two were primipara, 2 2nd para and the other was a grandmultipara.

An interesting point has been noticed in all these cases. Amenorrhoea for 2 to 3 months following the evacuation of hydatidiform mole was common to all these patients. Jeffecoate (1967) has re-

marked that failure of a normal menstrual function to return within reasonable time should be regarded with apprehension. Haemoptysis was present in 2 cases. Bleeding per vaginum was the main symptom only in 2 cases. Uterine enlargement was present in all the cases. Although it was formerly stated that lutein cysts of the ovaries were frequently associated with trophoblastic disease, more recent authors report their occurrence in a minority of cases. Hertig 1967—10 per cent. According to Novak and Seah (1954) there are many ovaries which do not show any palpable cystic changes but may show various lutein changes on histopathological examination. In the present cases bilateral polycystic ovaries were present in 2 cases. In the other 3, ovaries showed no cystic changes. Histopathological reports of all these cases showed lutein cysts.

Biological pregnancy test was positive in 4 cases. In case 1 repeated urine examination showed negative result, but on fifth occasion it was positive. Brewer (1968) has remarked that the test may be negative because the capability of chorionic tissue to produce gonadotrophin is variable. Jeffcoate (1967) has stated that in some cases biological pregnancy test may be negative where the malignant trophoblastic tissue is covered by fibrin deposit. The distinguishing features of invasive mole as listed by Novak and Seah (1954) are (1) excessive trophoblastic overgrowth, (2) extensive penetration of the trophoblastic elements into the myometrium, sometimes upto peritoneum and parametrium. In the present series on macroscopical examination in 2 cases invasion was deep into the myometrium and in other 3 cases the peritoneal coat was also involved.

Endometrial curettage was done in 2 cases. Histopathological reports did not

show presence of any chorionic tissue. Presence of myometrial invasion can not usually be determined from the curettings. Thus positive findings in the curettings is helpful but negative findings have got no value.

Plans of treating invasive mole have become revolutionized at present. Hertz *et al* (1963) Ross *et al* (1965) have utilised methotroxate and other chemotherapeutic drugs for the treatment of invasive mole. Previously methotrexate was used as an adjunct to surgery. But Hertz and his co-workers have started a trial of primary chemotherapy without surgery. In invasive mole results are very much successful. Recently a study of Ross *et al* (1965) reported remission rate over 90 per cent. According to Hertz, primary chemotherapy alone gives better results than when combined with surgery, because there is a possibility of dissemination of tumour emboli by the manipulation during surgery. But Lamb, *et al* (1964) indicate that chemotherapy alone should be reserved for the young patients desiring further pregnancy and that combined chemotherapy and hysterectomy should be the usual method of treatment. Again hysterectomy is also indicated even in young patients when excessive toxicity or failure of response to chemotherapy is present. Occasionally massive uterine haemorrhage may also necessitate hysterectomy in young patients. In the present series methotrexate was used in all cases. In 2 cases local excision and repair of uterine wall was performed in addition. In other 3 hysterectomy was done, which was followed by methotrexate during postoperative period. Results are promising in all these cases upto now. Hertig *et al* (1963) have observed that a lesion of short duration (less than 4 months) and a low titre of HCG indicates a much more favourable

prognosis. In the present series all the cases were diagnosed within 6 months of evacuation of hydatidiform mole. Urine became negative within 3 weeks of starting methotrexate in all the cases.

#### Summary and Conclusions

Five cases of invasive hydatidiform mole have been described. In all these cases diagnosis was confirmed by laparotomy. In 2 cases uterus was preserved since the patients were very young and without any living issue. All the cases were treated with methotrexate in addition. Urine became negative within 2 to 3 weeks of starting methotrexate. Results upto now are quite satisfactory. But, without following up these cases for another 2 years it is not possible to comment anything about the cure rate.

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