INVASIVE HYDATIDIFORM MOLE

(Report of 8 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. Chorioadenoma destruens was applied by Ewing, but it seems to be a misnomer because the term chorioadenoma was applicable for the supposed analogy of the chorionic villi with glands, but histopathology is not like that therefore the better term is invasive mole.

Many workers claimed that the incidence of invasive mole is very uncommon. Ringertz (1970) mentioned that 3.5% of moles are invasive moles or choriocarcinomas. But just like the incidence of hydatidform mole, the incidence of invasive mole also seems to be very high in India. Chakraborty *et al* (1976) has reported 4 cases of malignant mole in 2 years. Very recently Sen Gupta and Chakravarthy (1978) have reported 5 cases of invasive mole in a period of 2 years.

In the present series we are reporting 8 cases of invasive mole in a period of 4 years, among 54 trophoblastic tumors forming a percentage of 14.5.

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Case 1

A muslim female aged 30 years, was admitted for irregular bouts of vaginal bleeding. There was history of evacuation of a vesicular mole 2 months age. She was 3rd gravida. Past history revealed normal deliveries.

General examination revealed a moderately built female with pallor (Hb 6G% Urine test negative for HCG.

Per abdomen, uterus was just felt above the symphysis pubis. Per vaginum, uterus was 12 weeks size of pregnancy. Ovaries were of normal size. X-ray chest did not reveal any abnormality.

Total abdominal hysterectomy along with bilateral salpingo-oophorectomy was done fol-

lowed by Methotrexate therapy. Post operative period was uneventful.

Pathological examination of the specimen revealed a bulky, soft uterus containing remnants of necrotic molar tissue which histologically showed malignant trophoblastic cells invading the myometrum in sheets and individual cells, as well with villi formation (Fig. 1).

Case 2

A Hindu female aged about 30 years, was admitted for irregular vaginal bleeding following evacuation of a hydatidiform mole 4 months back. The previous curettage showed hydatidiform mole grade III with malignant trophoblastic proliferation. Urine was positive for HCG, X-ray chest revealed nil significant.

Total abdominal hysterctomy was performed and 2 bottles of blood transfusion was given. Methotrexate therapy was started from the day of operation. Postoperative period was uneventful.

Pathological examination revealed invasive mole. Ovaries were normal.

Case 3

A muslim female aged 30 years, was admitted for irregular profuse vaginal bleeding since 2 months. The bleeding was followed by amenorrhoea of 1 year. The patient was 4th Gravida. Past History revealed evacuation of molar tissue. Pain in the abdomen was present.

On examination the patient was pale (Hb 4 G). X-ray chest revealed nil significant. Urine was negative for HCG. Per abdomen—Extreme tenderness all over the abdomenfl Per vaginum—Uterus was just bulky. Both ovaries were enlarged and cystic.

Preoperatively she was given 3 bottles of blood and a total abdominal hysterectomy was performed followed by Methotrexate therapy.

The uterus was soft and slightly bulky which contained a polyp like mass measuring 3 x 2 c.m. firm to soft in consistency. Histopathological examination showed invading molar tissue into the myometrium.

Case 4

A Hindu female aged about 45 years was admitted for irregular profuse vaginal bleeding since 2 months and pain in the abdomen. She was 5th Gravida. She had evacuation of molar pregnancy 6 months back. Patient had amenorrhoea for about 3 months after evacuation. Urine was positive in 1 in 100 dilution. X-ray chest showed no abnormalities. No history of cough or haemoptysis.

Per abdomen uterus was felt, of soft consistency. Vaginal examination revealed uterus of 16 weeks size pregnancy. Ovaries were of normal size.

A total abdominal hysterectomy was done followed by 2 bottles of blood transfusion and Methotrexate therapy.

The uterus was globular, soft and contained large blood clots with multiple small vesicles embedded deep into the myometrium, which histologically revealed invasive mole.

Case 5

A Hindu female aged 28 years, 3rd gravida, was admitted for continuous vaginal bleeding since 20 days. The bleeding followed evacuation of molar tissue 7 days back. The bleeding was profuse and was clinically suspected as choriocarcinoma.

General condition was poor with 6 G Hb. per abdomen uterus just felt above symphysis pubis. Per vagina, uterus was enlarged to 12-14 weeks' size of pregnancy. Right ovary was cystic and enlarged. Left ovary was just palpable. Os was open and vesicular mole could be seen through the os.

Urine examination was positive for HCG, X-ray chest did not reveal any abnormality. One bottle of blood was given and a curettage was attempted but the patient started bleeding profusely. Abdominal hysterectomy with right slapingo-oophorectomy was performed followed by Methotrexate therapy. Urine for rat test after operation was positive. Post-operative period was uneventful. Histopathological examination revealed invasive mole.

Case 6

A Muslim female aged 30 years was admitted with a history of irregular vaginal bleeding following 2 months amenorrhoea. She was 3rd Gravida. Past history revealed evacuation of vesicular mole 2 months back. Pain in the abdomen was present.

On examination patient was anaemic and extreme tenderness present all over the abdomen. No history of cough, haemoptysis headache or vomitings.

Per abdomen, uterus of 18 weeks' size was palpable.

Per vaginum, uterus was soft, 18-20 weeks' size of pregnancy. Left ovary was cystic and enlarged. Right ovary was of normal size, Examination of the lungs revealed crepitations on right mammary region. Occasional rhonchi present. Breath sounds were diminished on left side, but X-ray chest on vivo occasions did not reveal secondary deposits. Urine was positive 1 in 64 dilutions and 1 in 100 dilutions.

Preoperatively one bottle of blood was given and Methotrexate therapy started. Under general anaesthesia vacuum aspiration was attempted but the patient started bleeding profusely. Abdominal hysterectomy with left salpingo-oophorectomy was performed. Uterus was 20 weeks size. Vesicles were seen invading the funds, broad ligament, bladder and paravesical space. Left ovary was cystic and enlarged. Postoperative Methotrexate therapy was continued. Urine remained positive 1 in 64 dilution even 6 weeks after the operation. Patient's general condition was good at the time of discharge.

Pathological examination revealed a perforated uterus in the fundal region and the cavity contained clusters of vesicles embedded deep into the myometrium. Which histologically revealed Invasive Mole.

Case 7

A Muslim female aged 28 years was admitted in the Anantapur Hospital for irregular vaginal bleeding since 2 months. She was 2nd Gravida and there was history of abortion of hydatidiform mole 4 months back. Clinically suspected as chorion epithelioma and the Gynaecologist removed a piece from the uterus and sent the specimen to our Department. The bit measured 6 x 5 c.m. Which histologically showed invasive mole.

Case 8

A Hindu female aged about 30 years was admitted with irregular vaginal bleeding since 4 months which followed evacuation of mole. She was 3rd gravida clinically suspected as chorio-carcinoma and a total abdominal hysterectomy was performed followed by Methotrexate therapy. The uterus was bulky and soft and contained molar tissue attached deep to the myometrium which histologically showed invasive mole. Ovaries and tubes were normal

Discussion

Paranjothy (1970) has observed that average age incidence of invasive mole is around 30 and average gravidity is three and over. In the present series, in 5 cases age was 30 years, 1 was of 45 years and 2 were of 28 years. Five cases were third or fourth gravida, one was fifth gravida and 1 was second gravida.

In 7 cases the presenting symptom was irregular vaginal bleeding and in 1 case it was continuous bleeding following evacuation of hydatidiform mole. In 1 cases there was history of amenorrhoea following evacuation. Three cases presented with abdominal pain.

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 small percentage of cases (Hertig, 1967-10%). There are many ovaries which do not show any palpable cystic changes but may show various luteic changes on histopathological examination (Novak and Seah, 1954). In the present series. 2 cases showed unilateral polycystic ovaries, 1 bilateral polycystic ovaries and the remaining 5 ovaries showed no cystic changes.

Biological pregnancy test was positive in 4 cases. In case 6, it was even positive 6 weeks after operation and in cases 7 and 8 urine test was not done. Brewer (1968) has remarked that the test may be negative because the capability of chorionic tissue to produce gonadotrophin is variable. Jeffecoate (1967) has stated that in some cases biological pregnancy test may be negative, where the malignant trophoblastic tissue is covered by fibrin deposit.

The treatment of Invasive mole is varied. Hertz *et al* (1963) and Ross *et al* (1965) have utilized methotrexate and

other chemotherapeutic drugs for the treatment of invasive mole. Previously methotrexate was used as an adjunct to surgery. Recently, Ross *et al* (1965) reported remission rate over 90%. Lamb et al (1964) indicate that chemotherapy alone should be reserved for young patients desiring for further pregnancy and that combined chemotherapy and hysterectomy should be the usual method of treatment. In the present series, Abdominal hysterectomy with chemotherapy was followed in 7 cases and in case 7 hysterectomy was not performed.

Occasionally hysterectomy is also indicateed in young patients when excessive toxicity or when there is failure of response to chemotherapy or when there is massive uterine herrorrhage. In case 5 the patient was young (28 years) but hysterectomy was performed because of continuous profuse bleeding.

Hertig *et al* (1963) have observed that a lesion of short duration (less than 4 months) and low titre of HGG indicates a much more favourable prognosis. In the present series all the cases were diagnosed and treated within 4 months after evacuation of mole.

Summary

Eight cases of Invasive hydatidiform mole have been reported which form a percentage of 14.5 among total 54 trophoblastic tumors in a period of 4 years. In 7 cases Hysterectomy with Methotrexate therapy was implicated and till now results are satisfactory in 6 cases and the remaining 2 cases did not turn up for follow up.

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See Fig. on Art Paper II