# GESTATIONAL TROPHOBLASTIC DISEASE—SOME OBSERVATIONS

By

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## SUMMARY

**Trophoblastic disease is known for its clinical vagaries and bizarre signs and symptoms. Its etiology and pathogenesis are not very clear and considerable disagreement still exists even in definition and classification. Sometimes this disease presents an enigma for patients in rural areas of developing countries because of lack of diagnostic aids. A study of 45 cases of gestational trophoblastic disease is presented. Incidence in our institution was 0.37% of pregnancies. The disease was found in all socioeconomic groups between 15 to 45 years. However, it was common between 20-29 years and primigravidas. 4.44% were partial mole. Maternal death occurred in 4.44%. One death was because of malignant disease after term gestation. There was no preponderance of blood group A. Anaemia was universally present.**

## *Introduction*

Trophoblastic disease is known for its clinical vagaries, and bizarre signs and symptoms. Problems of diagnostic difficulties may be eliminated with modern diagnostic aids. But all these are not available to every patient in developing countries specially in rural areas. However its clinical manifestations are being managed so successfully that even its most malignant forms may be cured in many. Incidence varies from East to West. It is rather uncommon in United States and U.K. (1 in 2500 and 1 in 2000). Probably in Taiwan the incidence is highest (1 in 80) and in India the incidence varies from 1 in 196 to 1 in 480 in different parts (Tamaskar 1986). Its etiology and pathogenesis are not very clear and considerable disaggrement still exists even in definition and classification (Ratnam 1975). We endevoured to find out the magnitude of this disease and its clinical aspects at our institution.

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## *Material and Methods*

In the last 10 years from April 1977 to March 1987, 9254 deliveries have occurred, 2553 medical terminations of pregnancy were done and 486 patients were admitted with spontaneous abortions in the department of Obstetrics and Gynaecology of Mahatma Gandhi Institute of Medical Sciences Sevagram. It gives a total of 12293 obstetric cases. During the same period 45 patients of trophoblastic disease were managed giving an incidence of 0.37% of pregnancies. Ours is a rural in-

stitute in Central India. Routine ultrasonography facilities have just come. Regular quantitative human chorionic gonadotrophin estimation and many other investigations were not available to these patients. Sometimes simple pregnancy test was delayed or could not be done. Present study deals with some clinical aspects of these 45 patients of trophoblastic disease.

*Observations*

Out of 45 women, 36 came from nearby villages and 9 from the townships. There were only 3 teenage patients and one was above 40 years of age. Youngest patient was of 16 years and oldest 42 years. 42.22% were primigravida and maximum gravidity was 12. (Table I). Most of these patients came either in first or early second trimestor of pregnancy. One case of malignant trophoblastic disease presented 2 months after normal term delivery. There were two cases of partial mole (4.44%), 0.01% of all pregnancies. One patient had second trimester pregnancy with a foetus and other patient came with preterm labour and vomiting at 34 weeks gestation (Table II). Except for the patient with 34 weeks pregnancy and partial mole, all others had vaginal bleeding at admission (Table III). All the patients were anaemic, somee with 2 or 3 grams% of haemoglobin. There was one case of severe toxaemia (Table IV). Duration of symptoms varied from few hours to weeks. It was more than one month in 7 (15.56%), 7 days to 1 month in 19 (42.22%), 24 hours to 7 days in 10 (22.22%) and less than 24 hours in 9 (20%). In 38 patients with amenorrhoea 3 (7.89%) had height of uterus less than expected, while 31 (81.18%) had it more than expected, in 27 (71.05%) the discrepancy was more than 8 weeks. 18 (40%) belonged to blood group O, 12 (26.67%) to B, 11 (24.44%) to A and 4 (6.89%) to A B. Out of 7 cases of malignant disease 3 (42.86%) were of 0 group 2 (28.57%) of B group, 1 (14.29%) of A group and 1 (14.29%) of A B group.

TABLE I
*Age and Gravidity of Patients*

| | Age | | | | Gravidity | | |
|---|---|---|---|---|---|---|---|
| | <20 | 20-29 | 30-39 | >40 | G 1 | G2 G3 | >63 |
| No | 3 | 35 | 6 | 1 | 19 | 19 | 7 |
| % | 6.67 | 77.78 | 13.33 | 2.22 | 42.22 | 42.22 | 15.56 |

TABLE II
*Presentation of Patients*

| | No. | (In Amenorrhoea) | % |
|---|---|---|---|
| Amenorrhoea | | | |
| I Trimester | 10 | 26.32 | 22.22 |
| II Trimester | 27 | 71.05 | 60.00 |
| III Trimester | 1 | 2.63 | 2.22 |
| Post Mole expulsion | 2 | | 4.44 |
| Post Abortal | 1 | | 2.22 |
| Post Natal | 1 | | 2.22 |
| Metrorhagia | 3 | | 6.68 |

Out of 2 deaths (4.44%) 1 was of 0 group other was of A group. Diagnosis was very obvious in 27 (60%) (Table V). Regular quantitative estimation of human chronic gonadotrophin could not be done. Sometimes simple pregnancy test was done after a week. In 2 cases of malignant disease it was negative. In 38 cases disease appeared benign histopathologically and 5, (13.16%) of this group had marked proliferative activity. Hysterotomy was done only in 1 (Table VI). Out of 4 cases where hysterectomy was done, 3 were planned and 1 was emergency done for haemorrhage during dilatation and curettage. One case of malignant disease, a young nulipara was treated with methotrexate. Suction evacuation was preferred irrespective of size of uterus (34 to 36 weeks also). All the patients who had evacuation were subjected to curettage after a week. 41 (91.11) received blood transfusion, 26 (57.78) one unit each 8 (17.78) 2 units each and 7 (11.16%) more than two units. There were 2 deaths. One patient presented with hyditiform mole with severe anaemia and secondaries in lungs and died within 20 hours of admission. Other death was of malignant trophoblastic disease after term delivery.

TABLE III
*Symptomatology of Patients*

| | No. | % |
|---|---|---|
| Vaginal bleeding | 44 | 97.78 |
| Pain and discomfort | 41 | 91.11 |
| Amenorrhoea | 38 | 84.44 |
| Excessive vomiting | 8 | 17.78 |
| Cough and Haemoptysis | 4 | 8.89 |
| Chest pain | 2 | 4.44 |
| Swelling over feet | 3 | 6.67 |
| Fever | 2 | 4.44 |
| Heametemesis | 1 | 2.22 |
| Palpitation | 1 | 2.22 |

TABLE IV
*Associated Disorders*

| | No. | % |
|---|---|---|
| Anaemia—Mild | 31 | 68.89 |
| —Severe | 14 | 31.11 |
| Toxaemia—Mild | 9 | 20.00 |
| —Severe | 1 | 2.22 |
| Heart Failure | 2 | 4.44 |
| Urinary tract infection | 2 | 4.44 |
| Sickle cell Anaemia | 1 | 2.22 |

TABLE V
*Diagnosis at Admission*

| | No. | % |
|---|---|---|
| Vesicular Mole | * 27 | 60 |
| Threatened Abortion | 12 | 26.67 |
| Vaginal bleeding cause? | . 4 | 8.89 |
| Multiple pregnancy with preterm labour | 1 | 2.22 |
| Malignant trophoblastic disease | x 1 | 2.22 |

* One patient came with history suggestive of passing little bit of Mole.
. One patient was thought to be choriocarcinoma.
x Patient came with curettage report.

TABLE VI
*Operative Procedure Used*

| | No. | % |
|---|---|---|
| Suction Evacuation | * 32 | 71.11 |
| Evacuation | 7 | 15.56 |
| Dilatation and curettage | 5 | 11.11 |
| Hysterectomy | . 4 | 8.89 |
| Hysterotomy | 1 | 2.22 |

* All had follow up D & C.
. 3 had planned hysterectomy, 2 after D & C and one after suction evacuation, one emergency hysterectomy during curettage.

## *Discussion*

There is a lot of variation in incidence of trophoblastic disease probably because of etiological and precipitatng factors. Because of its more common occurrence in

poor countries malnutrition is thought to be a cause but Gupta and Konar (1984) found in their study that 46% patients were from affluent class. In our institution also with a general incidence of 0.37% of pregnancies, cases came from all socioeconomic classess. Cases are seen in all age groups. In our series most of the cases were between 20 to 29 years of age. Javey and Sayadi (1978) also found high number in the age group of 20 to 29 years. Though the cases were from all parity group there were more primigravidas. Some of them did not come with amenorrhoea, mainly the malignant ones. Vaginal bleeding was present in all except one. Javey and Sayadi had found amenorrhoea and bleeding in all the cases. One case of partial mole presented with 34 weeks gestation and delivered a live preterm baby and expelled partial mole with the placenta. The incidence of partial mole is reported to be 1 in 22000 (Jones and Leversen 1975). Sometimes patients with secondary deposits may present with symptoms due to secondaries. Two of our patients had presented with symptoms because of secondaries in chest. Both of them died. One of these had malignant trophoblastic disease after term delivery and developed secondaries in vagina and liver every rapidly and died. Gestational trophoblastic malignant disease after term pregnancy is known to have poor prognosis (Olive and Lurain 1984 and Dawn 1984). Anaemia, toxaemia, thyrotoxicosis etc. is known to be present with trophoblastic disease. All our patients were anaemic, 31.11% were severely anaemic. Severe toxaemia was present in 1 (2.22%) and 2 had heart failure. Diagnosis may sometimes be a problem in absence of diagnostic aids. Pregnancy test may be negative if dead chorionic tissue with degeneration and necrosis is present (Rohtagi, 1959). Height of uterus may not be more. In our series, in 7.89% it was less. In Ratnam's series in 23.9% it was less. Suction evacuation is the method of choice to have quick evacuation of uterus to minimize haemorrhage. Height of uterus should not be the criteria. We could do suction evacuation easily even with 34 to 36 weeks size of pregnant uterus. Important thing is cervical softness and opening. One patient who had presented with off and on vaginal bleeding needed emergency hysterectomy as she started bleeding profusely during diagnostic curettage. Profuse haemorrhage is the common problem and all precautions should be taken to minimize this. We did not find any preponderance of blood group A in benign as well as malignant disease as suggested by Dawood and Ratnam (1971) and Gupta and Kanan (1984).

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