HYDATIDIFORM MOLE IN TWIN PREGNANCY

by

N. R. BHARATHI,* M.D., D.G.O.

GOVINDA RAO,** M.B.B.S., D.P.H., M.S. (Path.), (USA), D.A.B.P. (USA)

and

A. CHALLAMMA, *** M.B.B.S., D.G.O.

Introduction

The association of hydatidiform mole with a viable normal foetus arising from binovular twins is a rare condition. We could find only eleven cases in the literature. Single cases have been reported by Beasley (1927), Favrean and Belenger (1939), Waters and Cruden (1943), Rase (1952), Taylor (1957), Sita Ratna and Sharma in 1966. Three cases were reported by Beischer in 1961 and by Purandare in 1968.

Case Report

Patient, aged 32 years, gravida three was admitted as an emergency with history of 6½ months' amenorrhoea and bleeding per vaginam since morning on 13-8-1970 at 2 P.M.

Previous Obstetric History

Married 10 years, gravida three, para two. Both were full term normal deliveries and alive. Age of last child was 3 years.

History of Present Pregnancy

Patient gave history of $6\frac{1}{2}$ months' amenorrhoea. So far the pregnancy was uneventful. The only complaint was bleeding per vaginam since that morning, which

*Asso. Prof. of Obst. & Gynec. Bangalore Medical College, Bangalore.

**Asso. Prof. of Pathology, Bangalore Medical College, Bangalore.

***Asst. Surgeon, Vani Vilas Hospital, Bangalore.

Received for publication on 27-11-1970.

was slight throughout the morning. There was slight abdominal discomfort. At about 2 P.M. the bleeding per vaginam increased and there was abdominal pain.

On Examination

The patient's condition was satisfactory. There was no anaemia. Pulse—98/min, B.P.—140/90. Heart and lungs—normal.

Abdominal Examination

Height of fundus was 26 weeks, uterus was tense and there were mild contractions. Foetal parts were palpable. Foetal heart sound were doubtful.

On Vaginal Examination

There was slight bleeding per vaginam, cervix was soft and external os was patulous; internal os was closed. A provisional diagnosis of threatened abortion was made. Conservative treatment was started. Patient was kept in labour room for observation.

Next morning i.e. 18 hours after admission, the patient expelled a foetus with entire placenta and a mass of molar tissue followed.

Pothologists Report:

Surgical No. 2055/70.

Gross appearance

The specimen consists of a placenta and foetus. Examination of the placenta shows a roughly ovoid area measuring 11 cm x 7 cm with the usual appearance of the cotyledons on the maternal surface. The foetal surface of this portion shows the amniotic sac and the umbilical cord measured 15 cm and attached roughly in its centre. The foetus measured 16 cm from crown to rump. Vesicular mole was attached to the membranes but separate from the normal placenta.

Between the normal placenta and the mass of vesicular mole there was amniotic membrane separating the two clearly. The molar tissue measured 10 cm in diameter. The tissue presented the typical appearance of vesicular mole there being a fairly distinct demarcation between the two zones. In the molar tissue there was a partially circumscribed, greyish-brown, soft, mass which appeared necrotic. There was no vascular connection between the placenta and molar tissue; hence the mole could not be a succenturiate lobe of main placenta.

Representative sections are taken for histopathologic studies.

Microscopic

Sections from normally appearing placenta show the usual appearance of villi and mild to moderate acute chorio-aminonitis.

Sections from molar tissue show large avascular villi with hydropic degeneration without any unusual proliferation of the trophoblast. The soft tissue adjacent to mole showed necrosis without any discernible foetal structures.

The foetus and cord were not remarkable.

Figure 1 shows the clinical photograph of the specimen.

Comments:

Twins where one placenta has undergone molar change cannot be diagnosed before delivery. The only way to diagnose is to suspect the condition when the patient has pre-eclamptic toxaemia in early pregnancy or has hyperemesis or has excessive enlargement of uterus.

An accurate diagnosis during pregnancy has been reported by Harper (1963) and Macvicar (1963) using ultrasonic visualisation. The condition may be suspected from high urinary chorionic gonadotrophin titre.

The prognosis to the foetus depends on its viability. The foetus can reach viability when the placenta to which the foetus is attached has no molar change or when it is a partial mole with major portion of the placenta being normal. In this case one placenta was normal and the other had undergone molar change completely. Hence it is a case of binovular twins.

Faulty endometrium may interfere with nidation of ovum and cause lack of blood supply resulting in molar pregnancy but this cannot be true in a case of twin pregnancy where one placenta and foetus are normal. In this case there was a mass of degenerated tissue in the vesicular mole. This mass could be a blighted ovum.

Chromatin studies show that most of the moles are genetically females. There in some difference nuclei of cells in a mole so that even XY moles show genetically female pattern. This is unlikely on karyometric grounds. It could be that moles come from the mother but there is no histological evidence for this hypothesis.

Summary

A rare case of twins with complete molar change in one placenta is reported. Few points regarding aetiology and diagnosis are discussed.

Acknowledgement

I thank Dr. Rajalakshmamma, Professor of Obstetrics and Gynaecology, Bangalore Medical College and Vice Dean, Vani Vilas Hospital, Bangalore, for permitting me to report this case.

References

- Acosta, Sison: Am. J. Obst. & Gynec. 84: 1425, 1962.
- 2. Beasley: Am. J. Obst. & Gynec. 67: 634, 1954.
- Beischer, N. A.: Brit. Med. J. 3: 476, 1967.

HYDATIDIFORM MOLE IN TWIN PREGNANCY

- Bhaskar Rao, K.: J. Obst. & Gynec. India. 20: 453 and 575, 1970.
 Eastman and Hellman: Text Book of
- 5. Eastman and Hellman: Text Book of 10. Obstetrics, ed. 13, P. 502.
- Faveren, A. and B Belenger, P. A.: (1939) Bull. Soc. Obst. & Gynec. Paris. 28, 179.
- Geoffrey, Chamberlain: Am. J. Obst. & Gynec. 86, 1963.
- 8. Hobday, M. B.: Brit. Med. & Gynec. 21: 6, 1964.
- Purandare, B. N.: J. Obst. & Gynec. India. 18, 1968.
 - Ram Gopal Uma: J. Obst. & Gynec. India. 20: 446, 1970.
- Rose, E. M.: Brit. Med. J. 1: 1285, 1952.
- 12. Sita Rathna A. and Sharma, V. J.: L. Brit. Med. J. 67: 301, 1960.
- 13. Taylor, J. M.: Brit. Med. J. 1: 1103, 1957.
- 14. Waters, E. G. and Gruden, A. B.: Am. J. Obst. & Gynec. 46: 299, 1943.

.

See Fig. on Art Paper VIII

515