

# Twin Pregnancy with Complete Hydatidiform Mole and Coexistent Foetus

Pages with reference to book, From 180 To 181

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Gestational trophoblastic disease encompasses a wide spectrum of conditions with variable presentations. Twin pregnancy with a complete hydatidiform mole and a coexistent normal foetus is encountered rarely. Two such cases seen at the Department of Obstetrics and Gynaecology, Jinnah Postgraduate Medical Centre, Karachi, between January, 1992 and July, 1995 are described.

## Case 1

A 25 year old primigravida with a previous normal delivery was seen at 18 weeks gestation with hyperemesis. There was no history of vaginal bleeding. The uterus corresponded to 30 weeks size, otherwise examination was unremarkable. Ultrasound scan showed a twin pregnancy, an 18 weeks size normal live foetus with anterior placenta and a separate hydatidiform mole in the lower part of uterus near the posterior wall. Serum beta human chorionic gonadotrophin (hCG) was 618,850 mIU/ml. The patient then lost contact with the hospital till admitted in emergency at 26 weeks gestation with heavy vaginal bleeding. Suction evacuation of the uterus through a 2 cm dilated cervix was attempted unsuccessfully, followed by emergency lower segment Caesarean section to empty the uterus and arrest haemorrhage. An 800 grams live male foetus and normal fundal placenta were delivered after amniotomy. Molar tissue filling up 1100 ml volume without any connection with the other placenta was removed separately from the lower portion of the uterus. Bilateral orange size theca lutein cysts were observed in the ovaries. Six units of whole blood and 1000 ml 'Haemaccel' were transfused before and during the procedure. The baby died 30 minutes after delivery. Chest X-ray and postoperative period were normal. Autopsy of the foetus and placental histology revealed no abnormality and second conceptus was confirmed to be complete hydatidiform mole. B-hCG six weeks later was in the non-pregnant range. She has subsequently delivered a normal male baby and remains well.

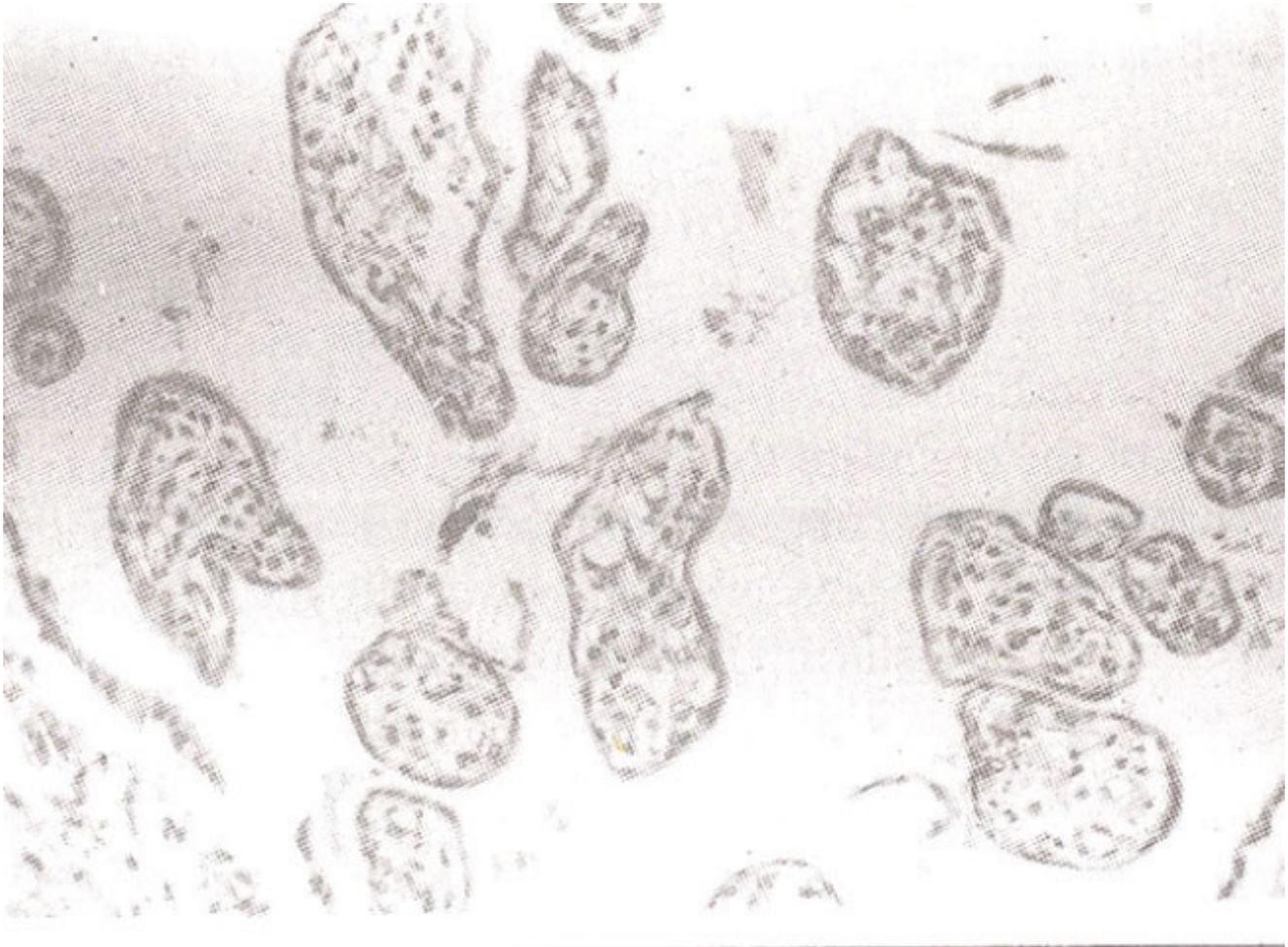
## Case 2

A 27 year old primigravida with previous normal deliveries was admitted in shock at 18 weeks pregnancy with heavy vaginal bleeding. The 30 weeks size uterus was contracting intermittently and molar tissue with blood clots was being expelled through the 5 cm dilated cervix. Molar tissue was evacuated with suction and sponge forceps. A separate amniotic sac was ruptured and a 500 grams macerated male foetus and placenta were delivered (Figure 1).



**Figure 1. Complete hydatidiform mole evacuated from the uterus with no connection to the normal placenta of the macerated male foetus removed at the same time.**

Four units of whole blood and 1000 ml 'Haemaccel' were transfused altogether. Serum B-hCG on the following day was 350 mIU/ml and chest X-ray was normal. The histopathology report confirmed a normal male foetus and placenta. The vesicular tissue removed separately turned out to be complete hydatidiform mole (Figure 2).



**Figure 2. Histology of vesicular tissue showing chorionic villi covered with trophoblastic cells and avascular core.**

Six weeks later, the patient was well and serum B-hCG was less than 5 mIU/ml. The couple are using the sheath for contraception presently.

### **Comments**

A pregnancy with a complete mole and a normal foetus is very rare, with a reported incidence varying between 0.005 and 0.01% of trophoblastic gestations<sup>1</sup>. The condition is believed to be more common after assisted reproduction techniques, consequent upon ovum handling causing genetic damage<sup>2</sup>. A twin pregnancy with a complete hydatidiform mole and a normal foetus as an accompanying conceptus is different from molar change in the placenta of a single foetus. In former foetal loss may occur in early pregnancy without leaving gross evidence of "a vanishing twin"<sup>3</sup>, whereas in latter the foetus is usually aneuploid with poor prognosis<sup>2,4-6</sup>

Exaggerated signs and symptoms of pregnancy with a uterus larger than the period of gestation and abnormally high levels of hCG<sup>8,9</sup> are an indication for an ultrasound examination. This would detect a twin pregnancy with hydatidiform mole and a coexistent foetus. Most such pregnancies undergo spontaneous termination by end of second trimester<sup>10</sup> with less than 20 such children reported in world literature to date<sup>11</sup>.

The dilemma for the clinician arises in continuing pregnancy following diagnosis. While some authors recommend immediate termination<sup>11,12</sup>, others hold a different view. Prenatal diagnosis with amniocentesis rather than chorion villous sampling (CVS) is preferable because with CVS, the area biopsied may not be representative of the entire placenta<sup>3</sup>, leading to erroneous results in partial moles. After confirmation of normal karyotype in the coexistent foetus and appropriate patient counselling, continuation of pregnancy can be attempted despite a 30% risk of bleeding and preeclampsia. Treatment of associated complications like thyrotoxicosis is recommended<sup>3</sup>.

Natural course of these pregnancies is unpredictable<sup>2</sup>, with 60% going beyond 28 weeks<sup>3</sup>. Length of pregnancy has no impact on complications like persistent trophoblastic disease<sup>3</sup> or malignant sequelae. Favourable response to chemotherapy in gestational trophoblastic disease is another factor favouring conservative approach<sup>12,13</sup>.

Confirmation of diagnosis at abortion or delivery is essential. The karyotype of 95% complete moles is female (46,XX), so a coexisting male foetus adds weight to the diagnosis of twin conception rather than molar change in a singleton placenta<sup>14,15</sup>, however, external genitalia are not always representative of the actual sex<sup>10</sup>. It is, therefore,

recommended to perform histology and if available, tissue karyotype<sup>9</sup> and even analysis of chromosome polymorphism<sup>14</sup> for definitive diagnosis. Follow-up and prognosis of these women does not differ from other women with complete hydatidiform moles<sup>3</sup>.

## References

1. Suzuki, M., Masunobu, A., Wakita, K. et al. Hydatidiform mole with a surviving coexisting foetus. *Obstet. Gynecol.*, 1980;56:384-8.
2. McDonald, T.W. and Ruffolo, E.H. Modern management of gestational trophoblastic disease. *Obstet Gynecol. Surv.*, 1983;38:67-83.
3. Geijin, E.J.V., Yodema, CA., Hemrika, D.J. et al. Hydatidiform mole with coexisting twin pregnancy after gamete intra fallopian transfer. *Hum. Reprod.*, 1992;7:568-72.
4. Vejerslev, LO. Clinical management and diagnostic possibilities in hydatidiform mole with coexistent foetus. *Obstet. Gynecol. Surv.*, 1991 ;46:577-88.
5. Bowels, HE. Extensive hydatidiform mole formation with living child. *Am. J. Obstet Gynecol.* 1943;46: 154-9.
6. Szulman, A.E. and Surtyi, U. The syndrome of hydatidiform mole, cytogenetic and morphologic correlation. *Am. J. Obstet. Gynecol.*, 1978;131:665-71.
7. Lawler, S.D., Pickthall, V.J., Fischer, R.A. et al. Genetic studies of complete and partial hydatidiform moles. *Lancet*, I 979;ii:580.
8. Beischer, NA., Fortune, D.W. and Fitzgerald, M.G. Hydatidiform mole and coexistent foetus, both with triploid chromosome constitution. *Br. Med. J.*, 1967;iii:476-8.
9. Paterson, W.G., Hobson, B.M., Smart, G.E. et al. Two cases of hydatidiform degeneration of the placenta with foetal abnormality and triploid chromosomal constitution. *J. Obstet. Gynecol. Brit. Comm. With.*, 1971 ;78: 136-42.
10. Hobday, OR. and Bland, K.G. Hydatidiform mole with coexistent viable foetus *J. Obstet. Gynecol. Brit Comm. With.*, 1965;71 :965-6.
11. Zbella, E.A., Vermish, M., Deppe, G. et al. Coexistent complete hydatidiform mole and fetus after therapy with human menopausal gonadotrophin. A case report. *J. Reprod. Med.*, 1984;29:760-2.
12. Hohc, PT., Cochrane, CR., Gmelich, J.T et al. Coexistent trophoblastic tumour and viable pregnancy. *Obstet. Gynecol.*, 1971 ;38:899-904.
13. Yee, B., Tu, B. and Platt, L. Coexisting hydatidiform mole with a live fetus presenting as placental

previa on ultrasound. *Am. J. Obstet. Gynecol.*, 1982;144:726.

14. Jones, W.B. and Lauerson, N.H. Hydatidiform mole with coexistent fetus. *Am. J. Obstet. Gynecol.*, 1975;122:267-72.

15. Newlands, ES., Bagshawe, K.D., Begent, RH. et al. Developments in chemotherapy for medium and high risk patients with gestational trophoblastic tumours. *Br. J. Obstet. Gynecol.*, 1986;56:.53-9.

16. Fisher, R.A., Sheppard, D.M. and Lawler, S.D. Twin pregnancy with complete hydatidiform mole (46,xX) and fetus (46,XY): Genetic origin proved by analysis of chromosome polymorphisms. *Br. Med. J.*, 1982;284:1218-20.

17. Tominaga, T. and Page, E. Sex chromatin of trophoblastic tumours. *Am. J. Obstet. Gynecol.*, 1966;96:305-9.