

She started on lactulose, antibiotics and regular analgesia, and was discharged home 5 days later. Examination 6 weeks later showed complete healing of the perineum with a good anal tone; there was no urinary or faecal incontinence.

#### Discussion

While vaginal and perineal tears are common, delivery through the central perineum with an intact introitus remains a rare complication of vaginal delivery.

Prior to 1950 there were frequent reports of central perineal deliveries. A case report and literature review published in 1947 identified a collection of cases reported as early as 1796. Possible risk factors considered included: violent contractions, narrow or rigid vulva, long perineum, narrow pubic arch and scarring of soft parts (Barnes, 1947). In this case, the false delivery passage through the posterior vaginal wall could have resulted from stretching and tearing of the scarred vaginal wall by the descending fetal head.

Central perineal tears became rare in the latter half of the 20th century, possibly reflecting an improvement in obstetric care in developed countries. However, there were four published reports in the last decade, including one occurring in a woman with Ehlers-Danlos syndrome (Georgy *et al.*, 1997), one in a normal nulliparous woman (Gannon, 1991), one in a multiparous woman (Rahimi *et al.*, 1990) and another associated with a persisting occipito-posterior position (Stern, 1998).

Common to these reports is a description of quick labour, perineal distension, bruising and fresh vaginal bleeding followed by rapid delivery.

The reappearance of this complication of labour could be a result of an increasing reluctance to perform episiotomies in favour of 'natural' perineal tears. While we are not advocating the routine use of episiotomies, we feel that one should be aware of this complication when there is unusual bleeding prior to delivery, and the use of an episiotomy should be considered.

#### References

- Barnes J. (1947) Central rupture of perineum. *Journal of Obstetrics and Gynaecology of the British Empire*, 54, 351-357.
- Gannon M.J. (1991) Delivery through the perineum. *Journal of Obstetrics and Gynaecology*, 11, 114-115.
- Georgy M.S., Anwar K., Oates S.E. and Redford D.H.A. (1997) Perineal delivery in Ehlers-Danlos syndrome. *British Journal of Obstetrics and Gynaecology*, 104, 505-506.
- Rahimi M.A. and Haslam A.J. (1990) Perineal delivery. *New Zealand Medical Journal*, 103, 431-432.
- Stern R., Bernstein P. and Sherer D.M. (1998) Spontaneous delivery through the rectovaginal septum and perineal body: an unusual complication of the occiput posterior position. *Journal of Maternal and Fetal Medicine*, 7, 194-196.

## Complete hydatidiform mole co-existing with a twin live fetus

K. A. OBISESAN, O. A. ADESINA and O. A. AWOLUDE

Department of Obstetrics and Gynaecology University College Hospital, Ibadan, Nigeria

#### Introduction

Twin pregnancies can occur in which one twin is a normal gestation (46 chromosomes: 23 maternal and 23 paternal in origin) and the other twin is a complete hydatidiform mole (46 chromosomes all of paternal origin). Cases have been reported in which a normal fetus was delivered at term (Miller *et al.*, 1993). This report is of a patient who presented with a live twin co-existing with a molar pregnancy.

#### Case report

Mrs O. R. (a Nigerian Igbo) was a 32-year-old, gravida 7 para 5+1 (5 alive) small trader who presented at our accident and emergency department at a gestational age of 18 weeks with a 2-week history of intermittent bleeding per vaginam.

Abdominal ultrasound revealed a live, grossly normal fetus with posterior placenta. There was in addition an anteriorly situated intrauterine 'bubble' appearance suggestive of a molar pregnancy.

The symphysiofundal height measured 22 cm, giving a disparity of 4 weeks with the estimated gestational age. The blood pressure was 110/60 and the packed cell volume was 27%. Urinalysis did not reveal any proteinuria. A tentative diagnosis of hydatidiform mole co-existing with a twin live fetus was made. She was admitted and managed conservatively with bed rest and sedatives. The bleeding per vaginam subsequently subsided. Daily blood pressure monitoring and weekly urinalysis gave normal values. The electrolytes and urea were also within normal limits.

A repeat ultrasound scan at 20 weeks confirmed earlier findings. The patient remained stable and was discharged for psychosocial reasons, the conservative management to be continued on an outpatient basis.

She re-presented at 24 weeks with a 2-hour history of profuse vaginal bleeding and colicky lower abdominal pain. Vaginal examination revealed huge blood clots in the vagina. The cervix was 8 cm dilated. She subsequently expelled products of conception that included a fresh stillborn 800 g male fetus attached to a placenta. Both were grossly normal. There was in addition a mass of vesicular grapelike tissue.

She had a suction evacuation, which was uneventful. Serum B-HCG on the 13th day postevacuation was elevated with 680 mIU/ml

(normal 0-5 mIU/ml of serum). Subsequently, follow up was not possible as the patient discharged herself because of financial constraints and defaulted from follow-up.

Histological examination of the products of conception revealed normal villi in the placenta and hydropic degeneration of the molar tissue with no fetal tissues seen, thus confirming the diagnosis of hydatidiform mole.

#### Discussion

A case of complete molar pregnancy co-existing with an apparently normal pregnancy has been presented. It has been presumed that twin pregnancies with a complete hydatidiform mole and a co-existing fetus are dizygotic gestations. This has been confirmed by fluorescent *in situ* hybridisation (FISH) to evaluate placental X- and Y-chromosomal contents (with X- and Y-chromosomal probes) (Choi-Hong *et al.*, 1995).

A new classification of trophoblastic disease co-existing with a living fetus or fetuses has been suggested. Reported cases include quadruple pregnancy involving complete hydatidiform mole and three fetuses (Barguengoitia *et al.*, 1995) and a hydatidiform mole and a live co-existent baby after *in-vitro* fertilisation and embryo transfer (Cheng *et al.*, 1995).

Complete hydatidiform moles have hydropic swelling of all villi on gross examination. Microscopic examination reveals (a) oedematous swelling of chorionic villi, (b) no fetal tissues or blood vessels in the villi and (c) proliferation of trophoblast (Varma, 1991). The complete mole presents in over 95% of cases with uterine bleeding between gestational age of 6-16 weeks; 50% will have uterine size greater than expected for gestational age. Our patient showed these two features. Spontaneous abortion occurs late usually at 16-18 weeks (Van de-Kaa, 1995).

Diagnosis of hydatidiform mole is made by ultrasound. Multiple cystic echoes produced by the hydropic chorion villi are typical of hydatidiform mole (Barguengoitia *et al.*, 1995; Varma, 1991). In normal singleton pregnancy, the human chorionic gonadotrophin level is usually less than 100 000 IU/24 hours. A urinary HCG level greater than 500 000 IU/24-hour urine is suspicious of molar pregnancy, although it is not uncommon to find HCG levels greater than 500 000 IU per 24 hours in multiple gestation.

Correspondence to: K.A. Obisesan, Department of Obstetrics and Gynaecology, University College Hospital, PMB 5116, Ibadan, Oyo State, Nigeria. Tel: 02 2410088 Ext: 2455; Fax: 02 2413545, 2411768; E-mail: obgynuch@skannet.com

Treatment of hydatidiform mole is by suction evacuation of the uterus if confirmed before spontaneous expulsion. Other suggested methods of evacuation are hysterotomy and medical induction using oxytocin/prostaglandin alone. Follow-up consists of clinical examination of the patient and estimation of b-HCG on each visit and chest X-ray. It has been suggested that twin pregnancies composed of a normal conceptus and a complete mole have a relatively high risk for the development of persistent trophoblastic disease (Van de Kaa, 1995).

A true assessment of the antenatal and malignant sequelae risks associated with these rare gestations awaits the collection of a larger series of patients.

#### References

- Miller D., Jackson R., Ehlen T. and McMurtrie E. (1993) Complete hydatidiform mole coexistent with a twin live fetus: clinical course of four cases with complete cytogenetic analysis. *Gynaecology and Obstetrics*, 50, 119-123.

- Choi-Hong S.R., Genest D.R., Crum C.P., Berkowitz R., Goldstein D.F. and Schofield D.E. (1995) Twin pregnancies with complete hydatidiform mole and coexisting fetus: use of fluorescent *in situ* hybridization to evaluate X- and Y-chromosomal content. *Human Pathology*, 26, 1175-1180.
- Ibarguengoitia F., Lira-Plascencia J., Argueta-Zuniga N. and Cabral Castaneda F. (1995) Multiple (quadruple) pregnancy involving complete hydatidiform mole and 3 fetuses. *Ginecologia y Obstetricia de Mexico*, 63, 275-278.
- Cheng P.J., Chang F.H., Liang C.C., Chang T.C., Soong Y.K. and Hsueh C. (1995) A twin pregnancy with a hydatidiform mole and an alive, coexistent baby after *in-vitro* fertilization and embryo transfer. *Journal of Assisted Reproduction and Genetics*, 12, 389-392.
- Varma T.R. (1991). Gestational trophoblastic disease. In: *Clinical Gynaecology*, edited by T.R. Varma, Chapter 19, pp. 582-615. London, Edward Arnold.
- Van de-Kaa C.A., Robben J.C., Hopman A.H., Hanselaar A.G. and Voorns G.P. (1995) Complete hydatidiform mole in twin: differentiation from partial mole with interphase cytogenetic and DNA cytometric analysis on paraffin embedded tissues. *Histopathology*, 26, 123-129.

## Massive postpartum haemorrhage from puerperal uterine inversion

E. E. EKPO

Department of Obstetrics and Gynaecology, New Cross Hospital, Wolverhampton, UK

#### Case report

A 29-year-old Asian woman in her second pregnancy had an uneventful antenatal course. Her first pregnancy ended in a caesarean delivery at 38 weeks' gestation for placenta praevia. This time, she was admitted into the delivery suite at term in spontaneous labour. She progressed rapidly and attained full dilatation after barely 3.5 hours. The second stage lasted 20 minutes and resulted in a vaginal delivery of a female infant weighing 3.48 kg. Delivery was aided by a right medio-lateral episiotomy. The Apgar scores were 9 and 9 at 1 and 5 minutes, respectively. One ampoule of syntometrine was given intramuscularly with the delivery of the anterior shoulder and the third stage of labour was completed 17 minutes later with delivery of the placenta by controlled cord traction. Ten minutes after the completion of the third stage, she developed massive postpartum haemorrhage unresponsive to syntocinon infusion despite the fact that the uterus was thought by the attending midwife to be well contracted. She then went into shock with a blood pressure of 77/43 mmHg and a pulse rate of 131 per minute. The initial diagnosis was hypovolaemic shock due most probably to a ruptured uterine scar.

Resuscitative measures were instituted immediately but the degree of haemorrhage was such that bimanual uterine compression of the uterus was necessary until the patient was taken to the theatre for examination under anaesthesia and possible laparotomy. Under general anaesthesia, it became obvious that the body of the uterus was in the vagina, and further examination revealed a dimple in the supposed fundus of the uterus. A diagnosis of complete uterine inversion was made. With the patient already anaesthetised, uterine relaxation was achieved with halothane and manual replacement accomplished without difficulty. Following the replacement, a hand was kept in the uterine cavity until firm uterine contraction was achieved by syntocinon infusion. The episiotomy was repaired in layers and no further blood loss was seen. The total estimated blood loss was 3 litres and she received a total transfusion of 6 units of blood. She had prophylactic antibiotic cover and made an unremarkable recovery. She was discharged home 4 days after delivery.

#### Discussion

Puerperal uterine inversion is a rare but serious obstetric complication that carries a high maternal mortality. Early diagnosis is crucial to the survival of the patient. It is commonly thought to be associated with non-haemorrhagic postpartum collapse (Thompson and Greer, 2000). However, the case reported here presented with a massive postpartum haemorrhage. A diagnosis of uterine rupture from a scarred uterus was initially entertained because of her previous history of caesarean delivery. Bimanual uterine compression coupled with immediate resuscitation were the immediate life-saving measures in her management. Several techniques for the management of uterine inversion have been described. These include manual replacement, hydrostatic replacement and surgical correction (Huntington *et al.*, 1928; O'Sullivan, 1945; Thompson and Greer, 2000). Ogueh and Ayida, (1997) has warned about the possibility of aggravating vasovagal shock by manual replacement but this was not the experience in this case. Under general anaesthesia and with good uterine relaxation, manual replacement was accomplished without difficulty.

Although uterine rupture is a recognised cause of massive postpartum haemorrhage, especially in the presence of a scarred uterus, uterine inversion as a possible differential should always be considered as early diagnosis of uterine inversion is essential to the survival of the patient.

#### References

- Huntington J.L., Irving F.C. and Kellogg, F.S. (1928) Abdominal reposition in acute inversion of the puerperal uterus. *American Journal of Obstetrics and Gynaecology*, 15, 34-40.
- Ogueh O. and Ayida G. (1997) Acute uterine inversion: a new technique of hydrostatic replacement. *British Journal of Obstetrics and Gynaecology*, 104, 951-952.
- O'Sullivan J.V. (1945) Acute inversion of the uterus. *British Medical Journal*, 2, 282-283.
- Thompson A.J. and Greer J.A. (2000) Non-haemorrhagic obstetric shock. In: *Clinical Obstetrics and Gynaecology: Emergencies in Obstetrics and Gynaecology*, edited by S. Arulkumaran, pp. 19-41. London, Ballière Tindall.