

PUERPERAL INVERSION OF THE UTERUS

(Report on 4 cases)

by

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Introduction

Hippocrates is said to be the first to have recognised an inverted uterus, but Ayurvedic literature suggests that the condition was known to the ancient Hindus. Acute inversion occurs usually during and after the third stage of labour. Very rarely, extrusion of a sub-mucous fibromyomatous polyp attached to the fundus may cause inversion of the uterus.

The incidence varies widely from place to place. O'Sullivan (1945) reported an incidence of 1 in 17000 to 1 in 200000 deliveries and the same incidence is stated by Donald (1969). In India, Das (1940) reported a frequency of 1 in 23,127 and Ghosh and Das (1972), 1 in 40,000. Its incidence is not that uncommon even today as is thought to be. Sengupta and Duttagupta (1976) recorded 5 cases in 21,693 deliveries in a District Hospital in West Bengal and Palanichamy (1976) reports 5 cases in 12,302 deliveries.

We are presenting 1 case of chronic and 3 cases of acute inversion coming from outside during the period from June,

1977 to September, 1977. During the last 6 years (1972 to 1977) we had 7 cases of acute inversion and 8 of chronic inversion among 54,227 deliveries.

Case 1:

Mrs. B. M., aged 22 years, P 1 + 0, was admitted on 10.6.77, with history of irregular bleeding per vaginum often excessive, for 8 months following delivery at home, when she had retained placenta and inversion of the uterus replaced by a doctor of the local hospital.

Her general condition was normal except mild anaemia. Vaginal examination revealed chronic inversion as evidenced by palpable absence of fundus and a reddish mass peeping through cervix on speculum examination. Sound test confirmed the diagnosis. Routine investigations were done and her Hb% was 10 gm%. Haultain's operation was done on 14.6.77. There was little difficulty in lifting up of the inverted fundus. It was repaired properly in two layers after the replacement of fundus. Omental graft was placed over the sutured area and plication of round ligaments was done.

The postoperative period was uneventful and she was discharged on 23.6.77. She reported normal menstruation in the follow up clinic. The uterus was normal in size, anteverted. Hysterosalpingography was done which showed normal shape of the uterine cavity.

Case 2:

Mrs. L. C., aged 30 years. P3 + 1, was admitted on 1-8-77, five hours after delivery in a suburb Nursing Home. She had normal

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delivery and the placenta was delivered by the attending physician who detected the inversion of the uterus after removal of placenta. She had retained placenta in her previous child birth as well. The attending doctor after preliminary resuscitation sent her to Eden Hospital.

On admission, she was in acute shock, pulse 148/min., B.P. 70/? mm of Hg., subnormal temperature, pallor+++ . The fundus was missing per abdomen. Her Hb% was 5 gm%. She was resuscitated with I.V. fluids, steroids, mephentine and a bottle of blood. The inverted uterus was lying inside the vagina, cervix could not be felt and a few placental bits found attached over the inverted fundus. Under G.A., reposition was tried by hydrostatic pressure in O'Sullivan's technique, but it failed. Manual reposition was done and ultimately the fundus could be pushed up with the pressure of the fist. Placental bits were removed. Inj. Methergin 1 amp. I.M. and I.V. given. The uterus contracted well within 5 minutes and it was maintained by I.V. syntocinon in drip. Vaginal cavity was packed. She received 3 bottles of blood on the day and 2 bottles afterwards. The postoperative period was uneventful. The pack was removed after 24 hours. She was discharged after 14 days. Examination after 6 weeks showed normal uterus, retroverted, mobile with clear fornices.

Case 3:

Mrs. S. G., aged 21 years, P 1 + 0, was admitted on 24.9.77, 4 hours after delivery in a peripheral hospital. She had normal delivery and the placenta was delivered by the attending accoucheur who detected acute inversion with P.P.H. and severe shock. After preliminary measures, he sent her to our Institution.

On admission, she was in acute shock, pulse—160/min., thready, respiration 40/min. B.P. 60/? mm of Hg. Vaginal examination revealed complete inversion of the uterus with moderate bleeding. Her haemoglobin was 7 gm%. She was resuscitated by I.V. fluid, steroids and a bottle of blood. After revival she was examined under anaesthesia, the vaginal cavity was cleared of large amounts of clots and manual replacement accomplished by usual method. The uterus contracted well with methergin and the contraction maintained by adding syntocinon with I.V. fluid. She received second bottle of blood next day. The postoperative period was uneventful except mild

fever and she was discharged after 10 days. She was advised to come after 6 weeks for follow up but she failed.

Case 4:

Mrs. F. K., aged 19 years, primi, was admitted on 9.7.77, 3½ hours after delivery at home. The delivery was normal but the midwife tried to deliver the placenta by cord traction which resulted in inversion and acute shock. No resuscitative measure was taken and the patient came here with placenta attached to the inverted fundus. On admission, she was very pale, pulse and B.P. not recordable. The uterus was found completely inverted. The officer on duty in the emergency room, immediately started I.V. drip. Steroids and vasopressors were used liberally, her Hb% was 3.2 gm% and she expired after 50 minutes.

Discussion

Inversion of the uterus is one of the most fatal complications in obstetrics. This accident usually occurs when the patient is confined by an inexperienced person although there may be some predisposing factor present like fundal attachment of placenta, adherent placenta, sudden violent cough or sudden rise of intraabdominal pressure in third stage of labour. In this series, inversion occurred outside in all the cases. The attending doctor perhaps failed to repose the uterus completely in the case of chronic inversion (Case 1). Two cases of acute inversion occurred in suburb nursing home and 1 had home delivery. Nothing could be done to the last case who was brought in a pulseless condition.

An important point is that, by the time a patient is sent to a bigger hospital from peripheral units, not only her general condition deteriorates due to delay, the local condition too is worsened which renders replacement more difficult and dangerous (Moir, 1971). So far acute inversion is concerned, probably the treatment of choice today, is manual reposition as soon as possible by the attending doc-

tor. Stallworthy and Bourne (1966) observed that every second is important. Donald (1969) emphasized that the best person to treat the condition is the attending accoucheur but unfortunately, we meet with a paradoxical situation. It occurs as a result of absence of skilled assistance or mismanagement of the third stage. He often worsens the condition by making delay in transferring the case to a well equipped hospital. In case 1 due to faulty reposition, she came to us 8 months after delivery.

An important point in the management is the question—whether reposition should be attempted immediately or after combating the shock properly. Stabler (1964) recommends immediate manual replacement but Donald (1969) opined that attempts of replacement in presence of severe shock may easily prove fatal. In our series, reposition was done under anaesthesia after combating the shock to a reasonable extent.

Maternal mortality in acute inversion varies from 16% to 40% (Daruvalla and Vijayakar, 1973). Das (1940) reported 13.2% and Bell *et al* (1953)—17.9%. We lost one of the three cases of acute inversion.

Summary and Conclusion

One case of chronic inversion and 3 cases of acute inversion of the uterus are reported with their etiology and management. The incidence, different methods of management and mortality are discussed.

In conclusion we stress that the management of third stage of labour in general and delivery of the placenta in particular should be taught thoroughly to the medical and nursing personnel in view of the high maternal loss from post

partum haemorrhage and less frequent complication—inversion of the uterus. The accoucheur must be sure whether the placenta has separated or not and one should not pull the cord until the placenta is separated.

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