Singapore Journal of Obstetrics and Gynaecology
November 2002; 33(3): 50-54

CASE REPORT

Acute uterine inversion reverted by laparotomy and division of ring anteriorly, Dobbins operation

Ashma Rana
Neelam Pradhan
Kanti Giri
Diki Bista
Jay K. Thakur

ABSTRACT

Puerperal inversion of the uterus is very rare but dramatic and life-threatening-Prompt treatment is warranted.
A case of acute uterine inversion in an adolescent who had late replacement 28 hours postpartum by laparotomy and division of ring anteriorly by Dobbins operation is reported.

Key words: Acute uterine inversion, abdominal replacement, Dobbin's operation

INTRODUCTION

Acute uterine inversion is a potentially life threatening serious obstetric emergency/accident, fortunately rare, occurring before the constriction of cervix in the most instances mainly due to the errors in the management of third stage of labour[1]. Complete inversion is so named for the uterine fundus which in-effect turns inside out exposing its endometrial surface being forced out beyond the dilated external cervical os trailing beyond, to protrude and appear into the vagina or outside.

Acute uterine inversion is always a complete inversion and occurs just after delivery, best managed instantly by manual reversion, which can be very effective. Sometimes the inversion may go unnoticed or remain undiagnosed. When this is recognized only after considerable time has already elapsed, the cervical rim forms an obstacle to manual reposition and in more refractory cases, it then becomes a necessity to incise and divide the rim to overcome the resistance in order to extrovert the uterus[2]. Laparotomy and division of the ring anteriorly, the Dobbins operation, is worth attempting[3].

Department of Obstetrics & Gynaecology,
TU Teaching Hospital Institute of Medicine
Kathmandu,
Nepal

Correspondence:
A/Prof. Ashma Rana
Department of Obstetrics & Gynaecology,
TU Teaching Hospital,
IOMPO Box 3578
Kathmandu,
Nepal

CASE

An 18 year old primipara was referred from District Private Nursing Home, as a case of uterine inversion Following vaginal delivery and pulling of the placenta as it was partially separated the patient reached us at the early morning hours after a long journey of 280 km. She looked pale, although a pint of blood had been transfused. The resident on duty had packed it properly thinking it to be a case of uterine prolapse.

In the morning round she was found to be in shock. Despite the enthusiastic packing, there was no trace of uterus in the abdomen neither any indentation, dimpling or crater like depression. She was soon shifted to labour room where examination was carried under sedation, first after catheterization and

removal of the three vaginal packs. The fundus of the uterus had prolapsed past the cervix, inside out exposing the endometrial surface, which remained short of the vaginal introitus (Fig. 1). Quickly she was transferred to the theatre as a case of acute, complete uterine inversion (2nd degree), and vaginal reposition was attempted under the general anaesthesia. The center of the fundus was cupped in the palm, while the finger tips were pointing towards the collar of the uterus (the cervical rim), by exerting equal pressure, trying to push the parts around it gently first, with the intention of reposition of the fundus; that is the part which inverted first in the process of reposition only towards the end. This was futile, may be due to the long hours that had elapsed already and the fact that the narrow cervical rim had advanced well above the symphysis pubis to the abdomen. Immediately laparotomy was done which located the cup of the uterus (Figs. 1–4). The cervical rim was seen as a small hole and the tubes and ovaries were drawn in exactly in the same way as it is illustrated in the text[4].

Manual eversion with simultaneous vaginal reposition was given a second try, which too was unsuccessful, because of the resistance formed by the dense cervical constriction ring. Therefore a transverse incision was given just above the bladder demarcation and after pushing the bladder down, two fingers were inserted through this incision and the fundus was finally hooked with two fingers and pushed upwards and brought out in the abdomen so as to extrovert the inverted uterus, simultaneously pushing fundus upwards from the vaginal route also. Proper retraction was ensured by running oxytocin and I/V ergometrine. The transverse incision was closed. But the uterus remained flaccid for a while which was compressed manually. As expected she had febrile postoperative period despite the good antibiotic coverage but finally recovered and was discharged on 30th Oct, after two weeks of admission/operation. This adolescent mother was breast feeding her female baby 2.5 kg birth weight. She was advised not to have another baby at least for two years and to have delivery in an institute for proper management of labor especially the third stage.

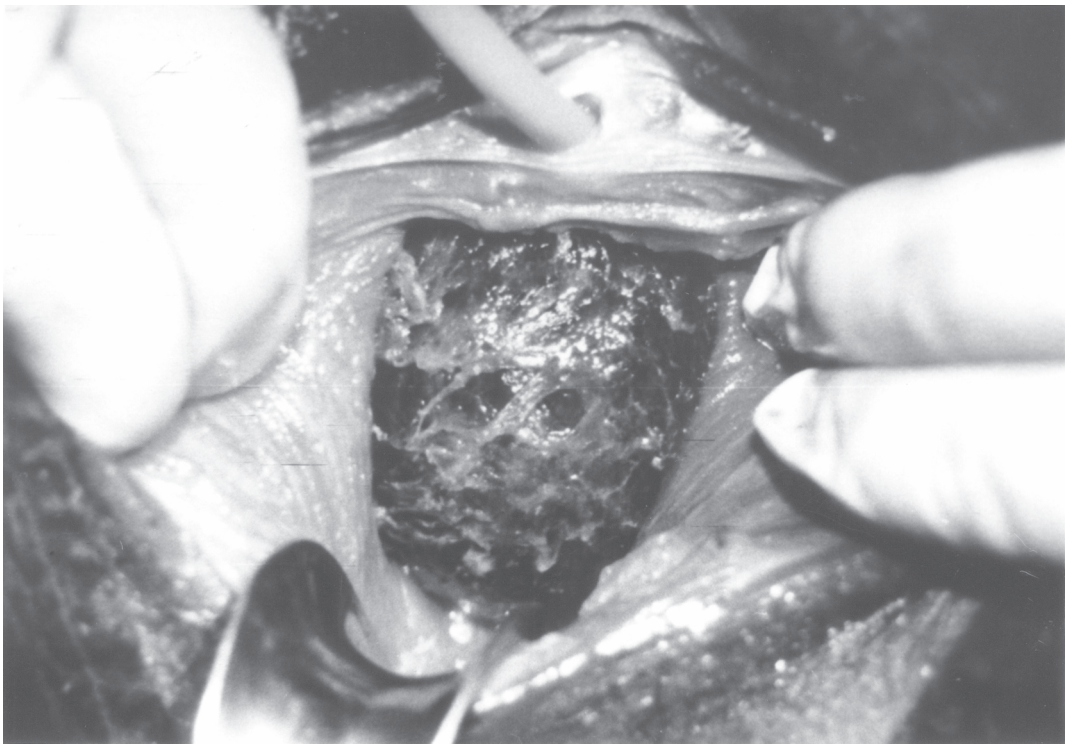

Fig. 1. The prolapsed fundus, turned inside out was lying within the vaginal introitus, exposing the endometrial surface which appeared bruised.

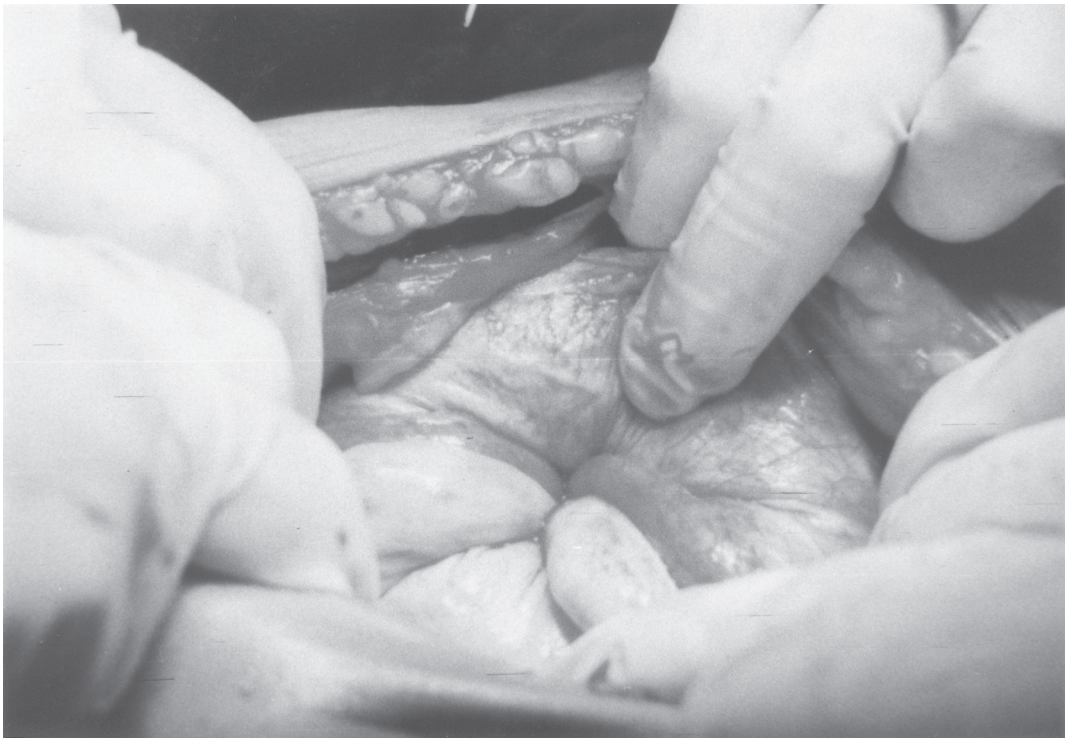

Fig. 2. On laparotomy cup of the uterus was located.

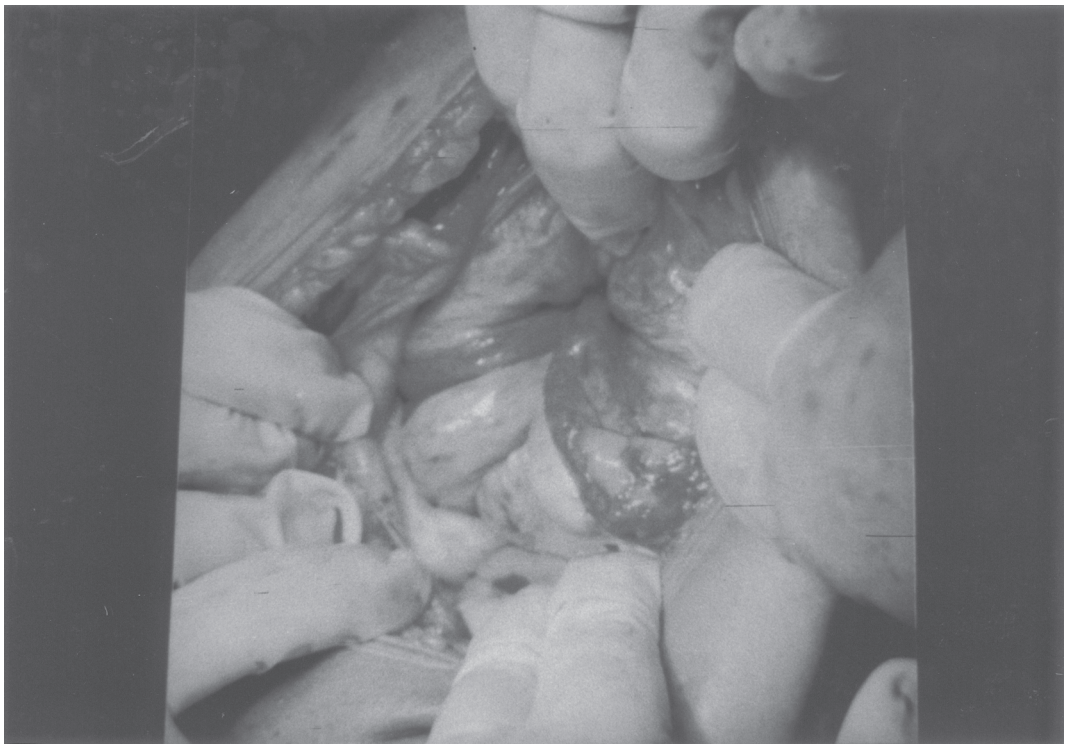

Fig. 3. Ovaries and tubes are seen drawn in the small constricted cervical ring.

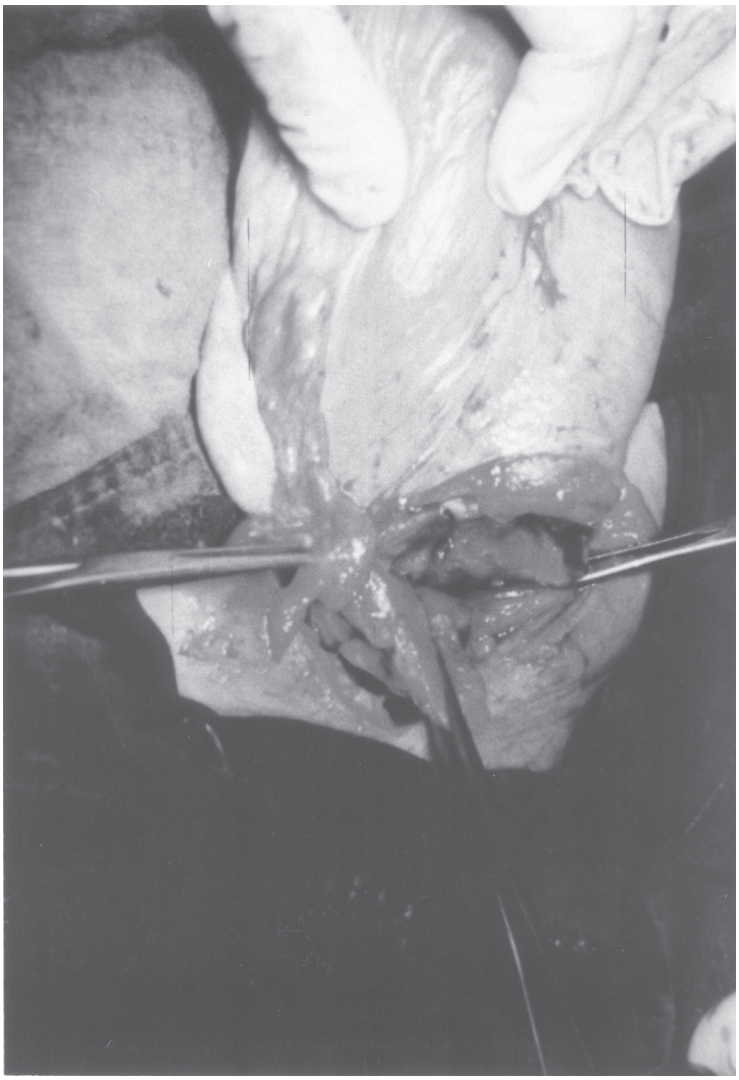

Fig. 4. Transverse incision made anteriorly to revert the inverted uterus.

DISCUSSION

Although the spontaneous uterine inversion has been claimed to occur quite frequently, but most of the time there is always an explanation for this rare obstetric emergency, the mismanagement of third stage of labour being accountable almost always, and described as an artificial inversion, which are often met in domiciliary delivery in the hands of inexperienced birth attendant. This patient clarified that following recovery, that she had excruciating/agonising abdominal pain exactly 9 hours of birth along with the vaginal bleeding of about half a liter. But was only examined by doctor 4 hours later when pain and bleeding recurred again. At this point reposition was first tried and on failure to do so she was referred to us.

Acute uterine inversion follows third stage of labour when the cervix still remains fully dilated, so as to allow easy access of the atonic flaccid uterine fundus to trail through it as seen in our case. This is invariably complete inversion too, the uterus turning upside down away from the endometrial cavity through the cervix uteri, exposing the endometrial surface (Fig. 1). She remembers that the event occurred following her strenuous bearing down, while the placenta was being just pulled through. This possibly happened when the flaccid uterus was atonic.

She received several doses of analgesics and the diagnosis had been delayed further beyond 12 hours. This case indicates that one should not introduce large doses of pain-relieving drugs without making the proper examination and diagnosis. The rarity of the case provides evidence of how it was initially mistaken for prolapse of the uterus.

We could not attempt the operative vaginal procedures like Kustner's or Spinelly, that is cutting away the constriction ring posteriorly or anteriorly respectively,

in this particular case simply because of the fact that, beside being a case of second degree uterine inversion it had already been examined and extensively manipulated innumerable times in vain. In abdominal approaches, dealing either with Huntindon's simple way of dragging back the inversion from above by the use of Allis forceps in pulling out the uterus, without incising the cervical ring or cutting the cervical ring posteriorly in Haultain's, has been popularly described. Here we would like to illustrate other method to correct most resistant case of inversion by going anteriorly, dividing the cervical ring and by doing the repair, thereby mimicking lower segment mini caesarean scar.

REFERENCES

1. Shah Hosseini and Everared JR. Puerperal uterine inversion. Obstet Gyecol 1989 Apr, 73(4):567-70.
2. DawnR Hostetler, Michael F Bosworth. Uterine Inversion. Obstet Gynecol 1989 Apr, 73(4):567-70.
3. Dali S M, Rajbhandari S and Shrestha S. Puerperal Inversion of the uterus in Nepal: case reports and review of literature. J. Obstet. Gynecol. Res. 1997. Vol 23, No 3: 319-325.
4. Beisher NA, Mackya E. V. Uterine inversion Obstetrics and the newborn. An Illustrated Textbook, Second edition. Sydney. W B Saunders 1986; 44:509-511.