

Chronic Uterine Inversion: A Rare Complication of Mismanaged Labour

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Introduction

Uterine inversion is a condition in which the uterus turns inside out with prolapse of the fundus through the cervix. It is a rare complication of mismanaged labour. Inversion varies in degree from a mere dimpling of the fundus to involvement of the whole uterus and cervix. It is seen in acute and chronic forms. Chronic inversion may follow an incomplete obstetric inversion unnoticed or left uncared. We present one such case due to the rarity of this condition and the diagnostic dilemma it presents in the non-puerperal stage.

Case Report

A 23 year old para two lady reported to the gynecological outpatient department with complaints of mass descending per vaginum of 1½ years duration, continuous bleeding per vaginum and generalized weakness of 15 days duration. She had a full term normal delivery at home 1½ years back following which she was in shock and managed conservatively by a local practitioner. Her complaints date back to her last delivery after which she had increased bleeding during menstruation which was continuous for last 15 days in the present cycle. On examination she was a thinly built and averagely nourished lady. General examination revealed tachycardia with a pulse rate of 120/minute, blood pressure of 110/60 mm of Hg and gross pallor. Systemic examination was within normal limits.

Speculum examination revealed a grossly congested and hyperaemic 5-6 cm mass with smooth surface (Fig. 1). Two small openings on either side of the mass could also be appreciated which corresponded to the two tubal openings in the uterine cavity. The rim of cervix could be seen but sound could not be passed around the mass. On per vaginal examination a globular mass was felt projecting from the cervix up to the level of the introitus. Uterus could not be felt separately from the mass. Uterus could not be felt on per rectal examination.

Laboratory investigations revealed a haemoglobin level of 2.4 gm%. Other haematological and biochemical parameters were within normal limits. Ultrasonography of the pelvis could not visualize the uterus in the pelvis which confirmed our clinical suspicion of uterine inversion. In view of her profound anaemia she was transfused four units of packed red blood cells (RBCs) which raised her post transfusion haemoglobin to 9.1 gm%. She was then taken up for reduction of the uterine inversion by Haultain's method. A laparotomy was carried out; a cup shaped depression was seen with pulling in of the round ligaments (Fig. 2). The uterus was pulled up with a volsellum and the posterior rim of the cup incised through both the thickness of the inverted wall (Fig. 3). The inverted fundus was pulled up from above, aided by a finger passed through the vagina. The incision into the uterus was sutured with interrupted no 1-0 vicryl and haemostasis achieved. Her postoperative period was uneventful and patient was discharged on the 7th day. Patient is on regular follow up.

Discussion

Acute uterine inversion is a life threatening obstetrical emergency which may follow a mismanaged third stage of labour. It can cause severe haemorrhage and shock, which may lead to death if not recognized and treated promptly. However it is a relatively uncommon condition occurring in one in 2000 deliveries [1]. When it is incomplete, it may be difficult to recognize and may then progress to a chronic condition. Non-puerperal uterine inversion is very uncommon, with no published figures regarding its incidence [2]. Non-puerperal uterine inversions generally occur due to the traction effect by a submucous myomatous polyp arising from the fundus or a senile inversion following high amputation of the cervix due to cervical atony and incompetence.

Chronic uterine inversion following an unnoticed or uncorrected postpartum inversion may be discovered

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Fig. 1 : Inverted uterus in the uterus with glistening endometrium

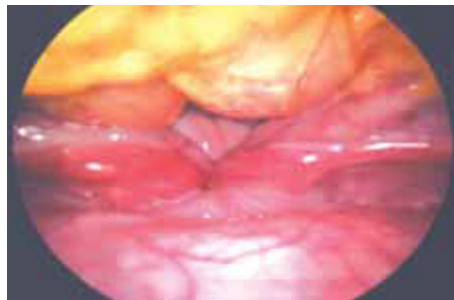


Fig. 2 : Absence of uterus in the abdominal cavity with a transverse slit of inverted fundus seen on laparotomy

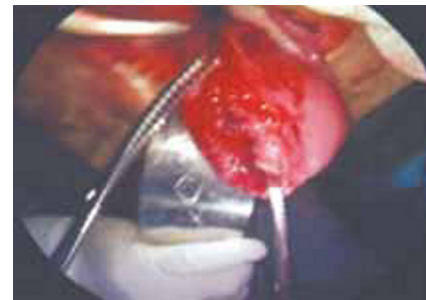


Fig. 3 : Haultains operation for uterine inversion : incision on posterior uterine wall

weeks or months after delivery as seen in our patient who presented 1 ½ years after delivery. The exact cause of uterine inversion is not clear but multiple predisposing factors are known. They are multiparity, application of fundal pressure in the second or third stage of labour, short umbilical cord and extensive cord traction in the third stage. The inversion may be incomplete at the time of delivery which progresses during puerperium.

The patient complains of vaginal discharge and irregular bleeding dating from confinement and there may be a history of postpartum haemorrhage or obstetric shock, the symptomatology conforming to the present patient who presented with gross anaemia. Other symptoms are low backache and chronic pelvic pain.

On examination an infected haemorrhagic mass is found in the vagina. The inverted uterus is likely to be confused with sloughing polyp, uterine prolapse or malignant neoplasm. Radiological diagnosis with ultrasonography and magnetic resonance imaging are employed when the diagnosis is uncertain. Ultrasonographical features include hyperechoic mass in the vagina with a central hypoechoic H shaped cavity in the transverse image, while the longitudinal image shows a U shaped depressed groove from the fundus in the centre [3].

The management of acute uterine inversion includes treatment of hypovolemia/shock and manual replacement of the inverted uterus through the vagina. However surgical intervention is necessary in chronic uterine inversions as the walls of the chronically inverted organ are in a state of complete involution with retraction and have little elasticity. Therefore the resistance of a constricting ring and that of the inelastic walls has to be overcome alongwith the rigidity of the retaining myometrium which cannot be overcome [4].

The available operations for the treatment of chronic inversion are Haultain's abdominal operation and the two vaginal surgeries: Spinelli's and Kustner's techniques. Spinelli and Kustner operations involve

replacing the uterine fundus through the anterior and posterior transections respectively [5]. The abdominal route is preferred over the vaginal as the incision of the uterus is reduced to a minimum, traction on the round and broad ligaments helps in reposition, the uterine wall can be more accurately sutured and haemorrhage more efficiently controlled [6]. Therefore we also adopted the Haultain's abdominal hysterotomy with a good surgical outcome.

In cases where the uterus is preserved, recurrence is rare in subsequent pregnancies if good obstetrical care is given [7]. Haultain himself has reported good pregnancy outcomes following the correction and we hope the same with our patient who is under follow up as she was desirous of further child bearing.

Conflicts of Interest

None identified

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