A Case of Acute on Chronic Uterine Inversion with Fibroid Polyp

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ABSTRACT
Chronic nonpuerperal inversion of the uterus is uncommon and is usually associated with a fundal submucous myoma extrusion. We report herewith the case of a young lady with hitherto asymptomatic long standing mass per vagina presenting acutely with vaginal bleeding and shock. The mass was a uterine myoma. She underwent hysterectomy in view of extensive necrosis.

CASE REPORT
A 28-year-old nulliparous women presented in shock. There was history of a mass protruding outside the vagina and bleeding per vaginum since 1 day. The mass was present inside the vagina for the last 8 months but had not caused any problems. General examination revealed tachycardia with a pulse rate of 120/minute, blood pressure of 90/60 mm of Hg and pallor. On local examination there was a 12 x 8cm size mass protruding out of the vagina with bosselated surface, patchy white flakes and there was bleeding to touch [Table/Fig-1a].

The patient had undergone Ultrasonography and MR Imaging elsewhere prior to presentation at our centre. The ultrasound report was as follows: “large heterogenous lobulated mass resembling uterus, showing area of haemorrhage and cystic degeneration protruding through the vagina to the exterior with non visualization of the uterus in the pelvic cavity, features suspicious of inversion of uterus probably secondary to malignant myometrial mass” [Table/Fig-1b].

After stabilization of her general condition a diagnostic laparoscopy was performed. Laparoscopy revealed the characteristic flower vase appearance of ovaries with no uterus inside the pelvis [Table/Fig-1c and d].

In view of the bleeding, malignancy was considered and a core biopsy of the vaginal mass was done. Histopathological study revealed fragments composed of spindle cells with areas of haemorrhage and edema . There was no evidence of malignancy. The pathological diagnosis was “fibroid polyp- leiomyoma with secondary changes.”

The patient was taken up for definitive surgery. The abdomino vaginal approach was used. As the size of the polyp did not permit repositioning of the uterus along with polyp, the polyp was excised [Table/Fig-2a]. Uterus was bisected both anteriorly and posteriorly [Table/Fig-2b]. Then using Allis forceps uterus was drawn abdominally after cutting the cervical ring [Table/Fig-2c]. A decision to perform hysterectomy was taken as there was extensive necrosis of the uterine wall [Table/Fig-2d].

The patient had an uneventful post-operative period and was discharged after 15 days with full recovery.

DISCUSSION
The occurrence of chronic inversion of uterus in a nulliparous woman is rare. Only about 100 cases have been reported in literature since 1942. Non gravid uterine inversion is usually associated with uterine pathology. Prolapse and extrusion of fibroids especially a sub mucous myoma of the fundus tends to be the most common factor inciting the inversion. Other less common causes are endometrial polyps [1-3] and inversion associated with uterine neoplasm. Leiomyoma, leiomyosarcoma, rhabdomyosarcoma, endometrial carcinoma, all have been known to be the preceding factors [4, 5].

The underlying cause of uterine inversion in 80%-85% of cases is uterine leiomyoma making it the most common cause. The proposed factors thought to contribute to uterine inversion are (a) a uterus previously distended by a tumor undergoing sudden emptying; (b) Intra uterine tumor causing thinning of uterus; and (c) dilatation of the cervix.

The condition is treated surgically. A fertility sparing surgical treatment is the ideal in this condition. In younger patients conservative operations are done either by abdominal or vaginal or by combined...
abdomino-vaginal approach. Huntington and Haultain procedures are the commonly used abdominal approaches and Kustner and Spinelli procedures are the commonly used vaginal approaches [6, 7, 8].

**Huntington’s Approach:** In this method pull is applied on round ligaments after laparotomy. Allis forceps is placed on round ligament about 2 cm below the insertion on both sides. Gentle traction by the operator’s index fingers and thumbs the uterus is turned outside in. The myometrium is reaproximated by two layers of running suture, and incision is closed in two layers.

**Haultain’s operation Principle:** After opening the abdomen the constricting ring is divided posteriorly and the inversion is corrected and incision is closed in two layers.

**The Spinell’s operation for chronic inversion of the uterus:** The technique involves dissection of the bladder from the inverted uterus. A midline split is made in the cervix and it is carefully separated from the bladder. The anterior wall of the everted uterus is split. By pressure with the operator’s index fingers and thumbs the uterus is turned inside out. The myometrium is reaproximated by two layers of running suture, and the serosal surface by a single layer. The vaginal skin is reaproximated with interrupted sutures, as is the full thickness of the cervix.

**The Kustner’s operation for chronic inversion of the uterus:** After opening the posterior cul-de-sac the cervix and posterior wall of the uterus are incised. On completion of this step, thumb pressure along the sides of the uterus produce reversion. Interrupted sutures are used to close the incisions and the uterus replaced in the pelvic cavity. This is followed by closure of the colpotomy.

The present case report is that of a woman presenting with non-puerperal uterine inversion secondary to a prolapsed fibroid, with accompanying uterine necrosis. In our patient hysterectomy was carried out as there was extensive uterine necrosis.

**CONCLUSION**

The occurrence of chronic inversion of uterus in the non puerperal state is a rarely encountered entity. On encountering a large prolapsed fibroid one should suspect the presence of chronic nonpuerperal uterine inversion. It is advisable to perform biopsy of the mass in view of its association with uterine malignancy. In chronic inversion secondary to a fibroid, the clinician should suspect infection of the fibroid and uterus. Vaginal restoration and removal is difficult. Abdominal hysterectomy with due care to locate the distal ureters along with intraoperative cystoscopy to ensure bladder and ureteral integrity is necessary.

**REFERENCES**


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