

A case of non puerperal uterine inversion in reproductive age

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Abstract

Non- puerperal uterine inversion is a rare clinical condition which most often occurs with tumor implanted of the fundus of the uterus. Leiomyoma is the commonest cause as a leading point for non- puerperal uterine inversion to occur. Unusual case report of non- puerperal uterine inversion caused by sub mucous leiomyoma is reported to 38 years old para 5 presented with vaginal bleeding and protruding mass per vagina with anemia and offensive discharge.

Uterine inversion was corrected abdominally by Haultain's procedure after vaginal myomectomy followed by abdominal hysterectomy. Both the ovaries were conserved.

Key words : uterine inversion, non- puerperal , leiomyoma

Introduction

Uterine inversion is a condition in which the fundus collapses into the endometrial cavity, which can turn the uterus partially or completely inside out.(5) It is a rare entity experienced in two different conditions; puerperal or non- puerperal. So far only slightly over one hundred cases of non- puerperal uterine inversion are reported, (7) .it is associated with the traction effect of mass lesions, such as benign sub mucosal leiomyoma.(3,4,7) It also occurs when other endometrial pathology exist in uterus such as endometrial carcinoma, sarcoma or endometrial polyp(1-7).

Case report

38 years old para 5 who has heavy menstrual flow for the last two years presented with suprapubic pain with campy type three days before she witnessed protrusion of mass per vagina and pain has significantly decreased after the protrusion per vagina .Associated with it profuse vaginal bleeding of four days duration when she arrives to Tibebe Ghion specialized hospital . Before her arrival to our hospital she went to local health center after one day of her compliant bleeding and protrusion of mass pre vagina for which she was given crystalloid and referred to general hospital where she was transfused with three units of whole blood and intravenous ceftriaxone and metronidazole for three days then she was referred to us . up on referral her vital sign was ;blood pressure 100/70 mm hg , pulse rate 92 , respiratory rate 24 and axillary temperature record of 36.4 c. Her complete blood count showed hemoglobin of 4g/dl before transfusion and 8g/dl after three units of whole blood transfusion . At our hospital her physical examination revealed general appearance acutely sick looking, her vital sign was blood pressure 100/60 mmhg , pr 98 bpm her conjunctiva was pale , her abdominal examination was unremarkable . in her pelvic examination ,there was prolapsed mass with dragging of the whole vagina out of introits which was necrotic with pussy discharge on it , there was 8x10cm isolated mass at the end of the protruded mass , see fig 1 through 5

For her presentation , anemia secondary to acute non puerperal uterine inversion due to delivered leiomyoma with super infection was made and after patient counseling about her condition and informed written consent was taken and blood prepared , she was taken to operation theater for surgery and vaginal myomectomy followed by haulten's procedure was done to reduce the inversion but it was difficult to reduce it by usual technique and after incision was extended to body of the uterus , it was reduced by pushing the uterus vaginally and the text book description

of haultein procedure abdominally ;followed by total abdominal hysterectomy was done. After the surgery, she was kept on parenteral antibiotics, transfused with two more units of whole blood. On her 3rd post-operative day she developed superficial wound infection which was managed with wound care and discharged after 10 days of hospital stay with smooth condition.

Pathology report indexed hemorrhagic infarct

Figure 1



Figure 2



Figure 3



Figure 4

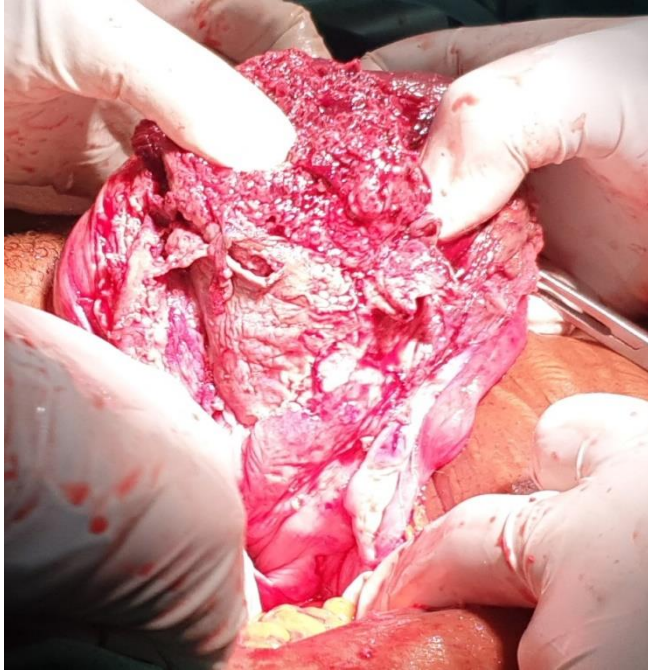


Figure 5



Discussion

Non-puerperal inversion of uterus is a rare clinical condition and hence it remains a diagnostic dilemma and treatment challenge. There are no exact figures on the incidence of it in the literature. Mivinyoglee et al reported that 97.4% of uterine inversions are associated with tumor,

out of which 20% were malignant, while Takano et al found that 71.6% of cases were associated with leiomyoma.(2)

The cases of non-puerperal uterine inversion present after 45 (3)

Based on the degree of uterine inversion, four distinct stages have been described.(2,5)

Stage 1 - Inversion of uterus is intrauterine/incomplete. Fundus remains within the cavity.

Stage 2 - Complete inversion of the uterine fundus through the fibro muscular cervix

Stage 3 - Total inversion, where by the fundus protrudes through the vulva.

Stage 4 - Vagina is also involved with complete inversion through the vulva along with inverted uterus

Clinical presentations of non-puerperal inversion include vaginal bleeding, mass descending through the introitus, lower abdominal pain, and urinary problem(1,2,3,4,5,6)

clinical diagnosis of chronic uterine inversion is difficult, more so if inversion is incomplete.

Diagnosis requires a high index of suspicion when tumor is palpable in vagina or seen out of introitus and uterine fundus is not palpable on bimanual examination. Ultrasound examination is the first line imaging investigation.7 USG features include indentation of fundus and depressed longitudinal groove extending into the centre of the inverted uterus. MRI is also helpful in diagnosis. U shaped uterine cavity, a thickened and inverted uterine fundus on sagittal section and a “bulls eye” configuration on an axial image are the described MRI findings of uterine inversion (2)

Surgical treatment depends on patients’ fertility, stage of inversion and associated pathology. Many abdominal and vaginal surgical approaches have been described to correct inversion. Spinelli and Kustner are trans-vaginal repositioning techniques and the Huntington’s, Haultain’s and Dobbin’s procedures are trans-abdominal techniques.(2,4,6)

Haultain’s procedure uses a vertical incision in the posterior portion of ring with gentle traction on the round ligaments. If a hysterectomy is to be performed, reposition is always done first, because hysterectomy on the inverted uterus is associated with difficulty in identification of the peritoneal pouches, and also associated with a greater risk of injury to the urinary bladder and ureters. In our case also, the same was followed.

CONCLUSION

Non-puerperal uterine inversion is an unusual condition. Clinical diagnosis is often not easy and sometimes this situation can prove to be fatal. A high index of suspicion is necessary for diagnosis when a large prolapsed fibroid is encountered, as the uterus perse may not be palpable on examination. Uterine inversion has a good outcome if diagnosed and managed timely.

Repositioning of uterus alone may not be possible in all cases, leaving hysterectomy as the only option as in our case.

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