Case Report

Non Puerperal Uterine Inversion in Unmarried Girl with Submucous Fibroid

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Abstract

A rare case of nonpuerperal uterine inversion caused by a large fundal leiomyoma in an unmarried girl presenting with heavy irregular vaginal bleeding, feeling of mass in vagina, severe dysmenorrhoea and retention of urine. Uterine inversion was diagnosed by clinical examination and radiological investigations. Her inversion was corrected by Haultain procedure performed abdominally. **Key Words:** Uterine inversion, leiomyoma, Haultain procedure

INTRODUCTION

Uterine inversion is a rare complication of delivery. In the series described by Hussain et al, the incidence varies widely from as many as one in 1584 deliveries to as few as one per 20,000 deliveries[1]. It is vanishingly rare in non-pregnant patients, with only 150 cases published between 1887 and 2006[2,3,4,5]. A non-puerperal uterine inversion is even more uncommon, with only 150 case published between 1887 and 2006[2,3,4,5]. The fact that many Gynaecologist might not see case any in their entire practice gives a clue as to its infrequent nature. The diagnosis can be difficult even on physical examination. Most non-puerperal inversions are usually associated with prolapsing uterine fibroid although it can occur with other tumours like [6,7,8,9] lieomyosarcoma and teratoma[6]. The aetiology of uterine inversion is not clearly defined. Possible explanations could be a thin uterine wall, rapid growth of the tumour, tumour size, fundal localization of the tumour, tumour attachment of the uterine wall with a thin pedicle, dilatation of the cervix by distension of the uterine cavity and sudden expulsion of the tumour[6]. Laparotomy for surgical repositioning is more usual (find and apply traction to round ligament) but a vaginal or even laparoscopic approach can be used[11,12]. Imaging procedures such as ultrasound and magnetic resonance imaging will contribute to the diagnosis[10]. We describe here a case of 18 years old unmarried girl who was diagnosed with non-puerperal uterine inversion and successfully managed by conservative surgical repositioning.

CASE REPORT

A 18 years old unmarried girl presented with complaints of heavy cyclical painful menstrual loss and vaginal discharge for last 7 months. There was history of lower abdominal pain and feeling of mass for last 2 months. She had no bowel complaints. She also had retention of urine three times before presenting to the hospital. On examination, her general condition was fair but she was distressed by her lower abdominal pain. She was afebrile and her vital signs were stable. She was markedly pale. The rest of the physical examination was unremarkable. Abdominal examination was normal and no masses were felt. On rectal examination a 8 x 8 cm size globular mass was felt and uterus was thought to be enlarged. Her haemoglobin was 6 gram/dl. Additional investigations confirmed an iron deficiency anaemia. Microscopic examination urine was normal. A transabdominal pelvic ultrasound scan reported the uterus in axial position and enlarged with a "fibroid" measuring 8 x 8 x 9 cm in the lower half of uterus. Both ovaries were demonstrated and were normal. No other masses were seen in the pouch of Douglas. Examination under anaesthesia was planned- and bimanual examination revealed a 8 x 7 x 8 cm mass in the vagina. Cervix could not be felt beyond the mass. When the mass was pulled gently with a pair of valsellum it prolapsed out of the introitus and fibroid was removed vaginally. After vaginal myomectomy still a globular mass persisted. So the diagnosis of a fundal fibroid with a uterine inversion become evident. As there was excessive foul smelling discharge, so the surgical correction of uterine inversion was planned after two weeks after treating her genital tract infection and correction of anaemia. A plannanstiel incision was made and the abdomen was entered in layers. The view from above is shown in Figure 1 were it shows the two round ligaments entering into a depression. An incision was made in the

anterior wall of the uterus extending from the cervix to the fundus of the uterus (modified Haultain procedure) as showed in Figure 2 and 3 This finally enalabed the uterus to be inverted back onto it self and be replaced in the pelvis. The cervix was repaired with 2 '0' vicryl sutures and the uterine incision repaired in two layers with No.2 Chromic catgut. The final result is shown in Figure 4. Post operative recovery was uneventful and she was discharged on the seventh post operative day. Histology reported a benign leiomyoma at. She was reviewed 6 weeks later. She was well and did not have any urinary complaints. Her periods returned subsequently and her periods were regular and lighter than before.

Figure-1
Operative Steps In Correction Of Inversion

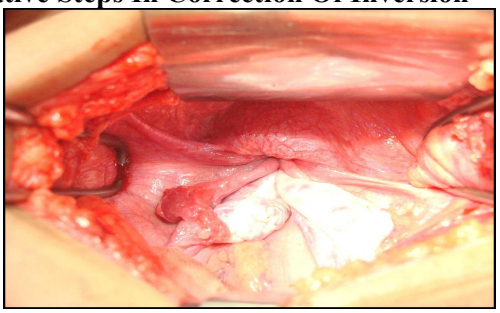


Figure-2
An incision was made in the interior wall of the uterus extending from the cervix to the fundus of the uterus

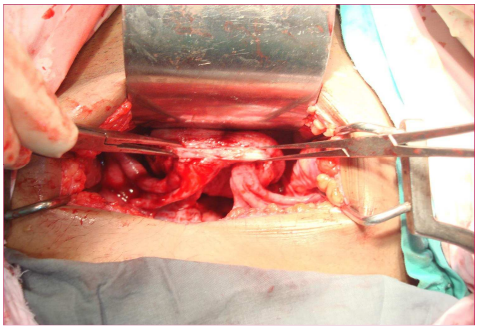
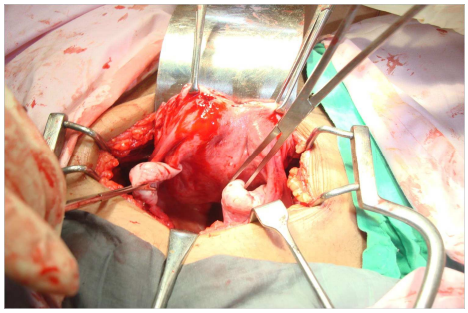
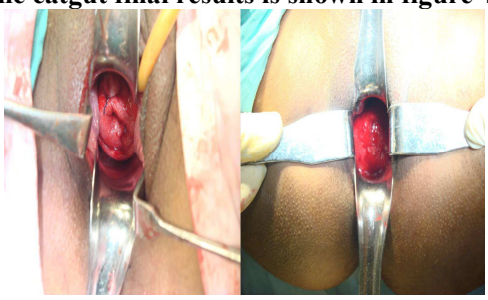


Figure-3
cervix was repaired with 2 '0' vicryl sulures and the uterine incision repaired in two layers



Figture-4
Cervix was repaired with 2 '0' vicryl sulures and the uterine incision repaired in two layers with No.2 Chromic catgut final results is shown in figure 4.



DISCUSSION

Non puerperal uterine inversion has been described as a rare occurrence by several authors but how really rare is it has not been defined[13]. There are two types of uterine inversion: Puerperal or obstetrics and non puerperal or gynaecologic[14]. A uterine inversion is a rare complication of the puerperium and a non puerperal inversion is an extremely rare occurrence. Four cases in young adults were noted in literature. These women, aged 15, 16 and 18 years, were diagnosed with rhabdomyosarcoma. Ueda et al[18] reported that a uterine inversion in women of reproductive age is associated with malignancy. So our case report is one of the rare study that mentions an inversion that was associated with a benign submucous myoma: The main symptoms of non puerperal uterine inversions are anaemia caused by irregular vaginal bleeding, vaginal discharge, lower abdominal and / or pelvic pain, a protruding mass in the vagina, and in some cases obstruction of the urethra. Same symptom complex was also reported in our patient. Our case report confirmed that the diagnosis of inversion may be difficult to make during examination. We note two determining findings, namely: (1) the uterine corpus is not palpated on bimanual examination, and (2) the cervix cannot be visualized after the vaginal mass was excised. Same diagnostic finding were seen in a study carried out by

Lascaride and Cohen [19]. Depending on the patients' reproductive desire and associated conditions, surgical repositioning or hysterectomy could be considered. Four surgical procedures are described to correct the inverted uterus, two via vaginal exposure and the other two via abdominal exposure. Spinell and Kustner are similar trans-vaginal surgical repositioning techniques with the basic differences being that Spinell's approach is anterior and requires dissection of the bladder and has uterine incision on anterior wall while Kustner's posterior approach with incision on the posterior uterine wall which makes it a bit easier and safer. The Huntington operation consists of making an abdominal incision and grasping the uterus with Allis clamp just below the inversion cup. The cup is pulled up and another pair of Allis clamps grasp the uterus at a lower level, this procedure is repeated until reinversion's completed. The Haultain procedure, also performed by the abdominal route, consists of incision of the constricting cervical ring posteriorly and reinversion of the uterus by traction on the fundus[20]. In this study we corrected the inversion by Haultain procedure, performed abdominally.

CONCLUSION

Non puerperal uterine inversion is very uncommon in women of reproductive age. Diagnosis is difficult and often obtained during operation but radiological evaluation may help in making the correct diagnosis preoperatively. Uterine sparing surgery should be attempted in young women until the final pathology of the disorders is known.

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