

DEPARTMENT OF OBSTETRICS & GYNAECOLOGY

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1. Uteroumbilical fistula with myometrial necrosis following compression suture for atonic PPH: a rare case
2. A huge cervical fibroid causing uterovaginal prolapsed- an unusual presentation, diagnostic dilemma and operative challenge.

Uteroumbilical fistula with myometrial necrosis following compression suture for atonic PPH: a rare case

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Introduction

Atonic post partum hemorrhage (PPH) is tackled with uterotonic, uterine compression sutures like B-lynch, cho-square, circumferential suture, etc., which decrease the need of peripartum hysterectomy. Rarely these compression sutures will result in damage to the uterus. Here, we are presenting the case of uterine myometrial necrosis with calcification presenting as weeping umbilicus following cho-square suture with bilateral uterus artery ligation for atonic PPH. To our knowledge, this is the first case to be reported.

A 20-year-old primigravida with term gestation presented to us in second stage and labor delivered a deeply asphyxiated baby by cesarean section. Per operatively there was severe atonic PPH, managed using uterotonics and bilateral uterine artery ligation and compression sutures (cho-square) using delayed absorbable suture. Postoperative period was uneventful but for subinvolution of uterus. Postoperative follow-up after 15 days and 2 months uterus was subinvolved, ultrasound showed involuting uterus with ET-8 mm. Patient was treated conservatively.

Patient came back after 5 months with history of mass per abdomen and dull acting pain and discharge from umbilicus. On examination vitals were stable, uterus was 22-week size, hard, tender, foul smelling discharge per umbilicus was present, per speculum cervix was pulled up, per vaginum uterus was 22 weeks age, restricted mobility. Clinically diagnosed as subinvolution of uterus. Ultrasound showed calcification around a vague mass. Contrast CT showed (Fig. 1) ill-defined heterogenous calcified uterus with thinned out myometrium.

Patient was taken for laparotomy, per operative dense adhesion was present, anterior uterine wall was necrosed (Figs. 2, 3) with large defect with calcification of myometrium and with uteroumbilical fistula. Hysterectomy was done, fistulous track excised and histopathology confirmed calcification of myometrium with necrosis.

Discussion

Uterine compression sutures decreases maternal morbidity and mortality associated with uterine atony and peripartum hysterectomy [1]. Ferguson [2] raised concerns about the possibility of uterine damage following extreme uterine compression using B-lynch technique. The cho-square suture has been associated with pyometra in postpartum period [3] with partial myometrial necrosis followed by combined with B-lynch [1]. Treolar reported 33 cases B-lynch suture for PPH, 2 women developed subinvolution and persisting vaginal bleeding after 3 weeks found to have tender subinvolved uterus. MRI showed avascular uterus except at rim. They underwent hysterectomy [4] similar to our case. Basket [5] observed the presence of grooves-whitened myometrium in 3 patients out of 7 who underwent LSCS in subsequent

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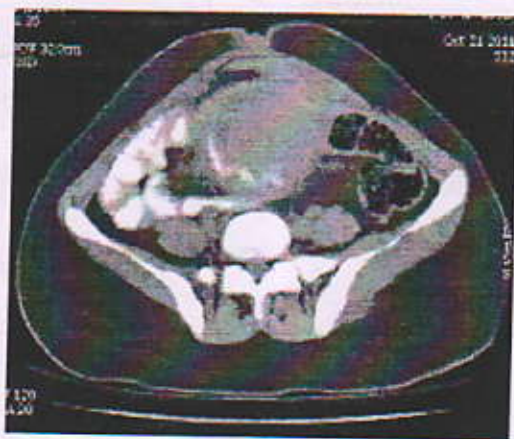


Fig. 1 CT showing myometrial necrosis with calcification



Fig. 3 Specimen of uterus with absent anterior wall

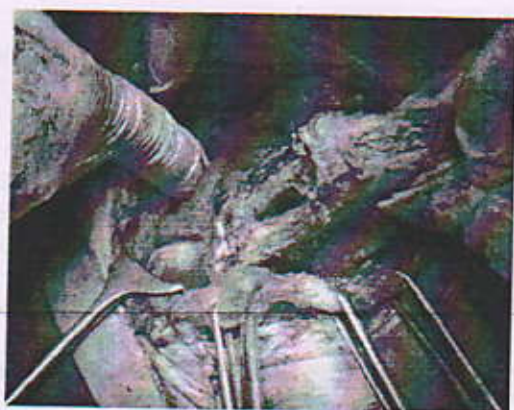


Fig. 2 Peroperative picture of uterus with necrosed anterior wall

pregnancies after B-lynch. These cases suggest that the pressure produced by compression suture could cause myometrial ischemic necrosis ranging from mild to partial to complete [4, 6].

Some authors attribute this to delayed absorbable sutures and recommend use of rapidly absorbable suture [7]. But uterus involutes much faster than the decreasing tensile strength of any type of suture. The damage therefore occurs in immediate postpartum period. In the present case, the patient has undergone bilateral uterine artery ligation with cho-square sutures which has produced myometrial necrosis and calcification and has developed a fistulus tract into the umbilicus which is very rare.

Conclusion

Atonic PPH can be effectively controlled by uterine compression sutures reducing the need for peripartum hysterectomy thus preserving fertility. We recommend regular follow-up for the patients who have undergone compression sutures for PPH at least for 6 months. In patient complaining of pain abdomen or persistent vaginal bleeding should suggest possibility of uterine necrosis and investigated further with CT or MRI.

Conflict of interest None.

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Case report

A HUGE CERVICAL FIBROID CAUSING UTEROVAGINAL PROLAPSE – AN UNUSUAL PRESENTATION, DIAGNOSTIC DILEMMA AND AN OPERATIVE CHALLENGE

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ABSTRACT

We report a rare case of a 35 yr Indian woman presenting with a mass per vagina since 2yrs and acute urinary retention since one day secondary to prolapsed cervical fibroid (15x8cm) which was mimicking chronic inversion and was making the anatomy unclear. It was managed by clear delineation of structures on the operating table. We believe that it is the first case of its own kind as the diagnosis could only be confirmed intraoperatively. Cervical fibroids present with varied manifestations posing difficulties in diagnosis and management. Thorough preoperative evaluation and anticipating operative challenges and judicious treatment help in relieving the misery for the patient.

Keywords: Mass per vagina, Prolapsed cervical fibroid, Acute urinary retention, Uterovaginal prolapse,

INTRODUCTION

Leiomyoma is the commonest of all pelvic tumors, being present in 20% of women in reproductive age group 30-35yrs.¹ The paucity of smooth muscle in the cervical Stroma makes leiomyomas in the cervix uncommon.² Though a rare entity 1-2% of them are located in cervix and usually in the supravaginal portion.³ Fibroids may be anterior, posterior, lateral or central in location involving either the vaginal or supravaginal portion of the cervix. Central cervical fibroid expands the uterus equally in all directions and the cavity of the pelvis is more or less filled by a tumour, elevated on top of which is the uterus like 'Lantern on the dome of St. Paul.

Uterine fibroids are benign clonal tumours arising from the smooth muscle cells of the uterus and contain an increased amount of extracellular matrix for which they are also referred as leiomyoma. Their

location in the cervix is not common and cervical fibroid belongs to Type 8 category in the new (International federation of gynecology and obstetrics) fibroid classification system.⁴

Cervical myomas with excessive growth may cause pressure symptoms.⁵ They present with abdominal mass⁶, incarcerated proclivity⁷, retention of urine, constipation, sensation of something coming down, foul smelling discharge per vagina and other variety of symptoms depending on location. Usually there is no evident menstrual abnormality associated with cervical fibroid. A large cervical fibroid may cause obstruction during Labour.⁵ Cervical leiomyoma causing uterovaginal prolapse with thick hypertrophied vaginal walls mimicking chronic inversion is rare. Large fibroid arising from the vaginal part of the cervix is often confused with

chronic inversion of uterus. Cervical fibroids prove to be a challenge to the clinician in view of their close proximity to important pelvic structures and of their likelihood to cause complications and difficulty in removal. Unusual presentations as in our case pose challenge to the clinicians and have to be kept in mind.

CASE REPORT

A 35 yr Indian woman P3L3 presented with mass protruding from vagina since 2 yrs, gradually increasing to present size of 15x8cm (Figure 1) associated with foul smelling discharge and acute urinary symptoms since one day. On examination, she was anemic, malnourished and had a firm mass of about 15x8cm from the introitus, which was irreducible, congested and inflamed with surface bleeding.

The exact origin of the mass couldn't be recognized and cervix and external OS couldn't be located. Ultrasonography revealed both ovaries were normal in size and situated in the midline posterior to bladder along with bilateral hydronephrosis but uterus couldn't be visualized.

The differential diagnosis of infected submucous fibroid polyp or chronic inversion was made and was managed with continuous drainage of bladder, parenteral antibiotics, local antiseptics and regular dressings. Two weeks later she was posted for surgery after correction of anemia.

Diagnostic laparoscopy before surgery revealed no evidence of chronic inversion, intraoperatively a bold incision was made on the posterior vaginal wall and pouch of douglas opened, and uterus with intact fundus was felt ruling out chronic inversion and an intraoperative diagnosis of huge fibroid from anterior lip of cervix was confirmed (Figure 2). The uterus was pushed posteriorly, and vaginal wall and uterovesical fold were opened anteriorly and bladder was pushed up safely and steps of hysterectomy were followed. Uterus with fibroid specimen was removed and sent for histopathological examination (Figure 3 & Figure 4). The procedure and post operative period were uneventful. HPE confirmed diagnosis of fibroid and patient was discharged on 5th day.



Fig 1: Huge mass per vagina making clinical diagnosis difficult

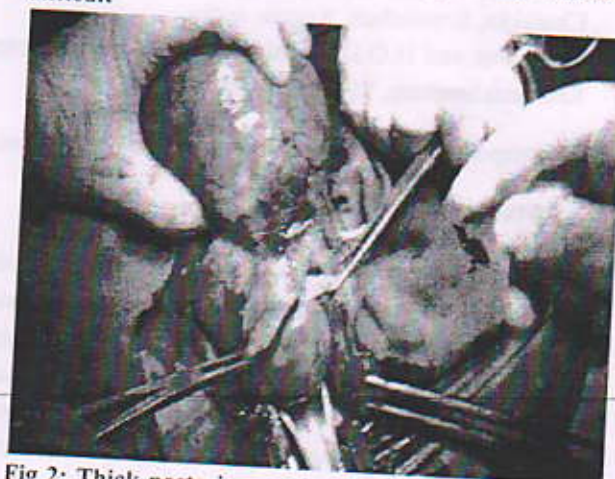


Fig 2: Thick posterior vaginal wall cut open, retracted to show the uterus



Fig.3: Anatomical delineation of structures showing uterus(*), cervical fibroid (straight arrow) and thickened vaginal wall (curved arrow)

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