Chronic Uterine Inversion Secondary to Submucous Fibroid: A Rare Case Report

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Abstract

Nonpuerperal uterine inversion is a rare condition. As nonpuerperal uterine inversion is rarely encountered by the gynecologist thus diagnosis and management could be challenging. We describe a case report of chronic inversion of nonpuerperal uterus secondary to submucous fibroid associated with severe anemia. A 45-year-old lady presented with menorrhagia and copious vaginal discharge followed by acute retention of urine. Diagnosis of partial inversion of the uterus was made, which was confirmed at laparotomy. Treatment of anemia was done and then she underwent abdominal hysterectomy with bilateral salpingo-oophorectomy after correction of inversion.

Key words: Fibroid, Inversion, Menorrhagia, Puerperal

INTRODUCTION

Uterine inversion refers to the descent of the uterine fundus to or through the cervix so that uterus is turned inside out. Uterine inversion is a rare condition that occurs usually as a complication of deliveries.¹ Nonpuerperal inversion is extremely rare representing about one-sixth of all inversion.² Prolapsed fibroids tend to be the most common inciting factors with an occasional report of inversion associated with uterine neoplasm and endometrial polyp. Three contributing factors proposed for uterine inversion are (1) sudden emptying of the uterus which was previously distended by a tumor (2) thinning of the uterine walls due to an intrauterine tumor and (3) dilatation of cervix.³⁻⁶ We report a case of chronic inversion of the nonpuerperal uterus due to large submucous fibroid with severe anemia.

CASE REPORT

A 45-year-old lady, $P_{3+0}L_3$ all vaginal deliveries (last child birth - 14 years back) presented to the RIMS gynecological

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outpatient on 6 August 2015 with a complaint of menorrhagia and congestive dysmenorrhea for last 8 months followed by copious foul-smelling vaginal discharge for last 6 months. On general examination, she had severe pallor and tachycardia (pulse rate - 112/min), blood pressure was in normal range. On P/A examination nothing was remarkable. On P/S examination-cervix was not visualized. A pink colored polyp of 8 cm × 8 cm with few necrotic area was seen in vagina (Figure 1). On bimanual pelvic examination - A large polypoidal mass of 8 cm × 8 cm felt in upper part of vagina, firm in consistency, smooth surfaced with bleeds on touch. Cervical lip could not be felt with distinction, and uterine size could not be assessed properly. A clinical diagnosis of submucous fibroid polyp with severe anemia was made. After 2 days of admission, she suddenly developed acute retention of urine, for which was put on the indwelling catheter. Except of severe anemia (hemoglobin-6 g%), all routine pre-operative investigations were within normal range. Her ultrasound (USG) revealed inversion of uterus with a right simple ovarian cyst of 5 cm × 4 cm. Clinical diagnosis was revised to inversion of the uterus with fibroid polyp and was posted for abdominal hysterectomy after correction of anemia (4 unit of packed cell volume transfusion done). On laparotomy, there was the typical appearance of uterine inversion, i.e., broad ligament, round ligament, and other associated structures were stretched due to uterine inversion (Figure 2). Uterine reposition was done by giving a vertical incision into

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posterior portion of the cervical ring and gentle traction on round ligaments (Haultain's method), with the simultaneous gentle pushing of fundus through vagina by an assistant (Figure 3). A sessile submucous fibroid of 8 cm × 8 cm size was attached to fundus which was



Figure 1: Perineal examination showing fibroid polyp



Figure 2: Laparotomy showing cupping of fundus of uterus



Figure 3: Repositioning of uterus

removed by enucleation. After correction of uterine inversion total abdominal hysterectomy and bilateral salpingo- oophorectomy done. Her post-operative period was uneventful and was discharged on 10th post-operative day in healthy condition. Histopathology of the excised polypoidal mass showed a picture of fibromyoma.

DISCUSSION

Uterine inversion can be classified into four stages as Stage 1: The inverted uterus remains in the uterine cavity, Stage 2: Complete inversion of the fundus through the cervix, Stage 3: The inverted fundus protrudes through vulva, and Stage 4: Inversion of the uterus and vaginal wall through the vulva. Inversion can also be classified as acute and chronic. With acute inversion, the patient may have severe pain in lower abdomen or excessive bleeding whereas chronic inversion may be insidious or patient may have lower abdominal discomfort, vaginal discharge, irregular vaginal bleeding, or anemia. In chronic inversion with sloughing of endometrium diagnosis, it is not very easy so detailed abdominal, and vaginal USG or Doppler may be required to confirm the diagnosis. 10

As nonpuerperal uterine inversion is rarely encountered by the gynecologist thus diagnosis and management could be challenging. In our case, on clinical examination, the diagnosis was not clear, so detailed ultrasound of abdomen and pelvis was done to confirm the diagnosis. Repositioning of the uterus can be done manually in acute cases but in chronic nonpuerperal case, manual reposition is not possible, especially in those cases associated with tumors. In chronic nonpuerperal cases, surgery is imperative. Considering patient's age, reproductive desire and associated conditions, surgical repositioning, or hysterectomy can be done.

Surgical repositioning can be done vaginally or through abdominal route. In vaginal route approach (Spinelli's method), incision is given anteriorly in the constriction ring and bladder dissection is required; while in Kustner's method, posterior uterine wall incision is given which make it bit easier and safer. 12 Abdominal route repositioning can be done either using Huntington's procedure¹³ (cup of inversion is identified, dilating the cervical ring digitally and gently pulling out round ligaments) or by Haultain's method¹⁴ where a vertical incision is given in the posterior wall of the cervical ring, and gentle traction is given on round ligaments. We reposited the uterus using Haultain's technique. Following that total abdominal hysterectomy with bilateral salpingo-oophorectomy was performed. The other methods include laparoscopic reduction, 15 the use of obstetrics ventouse at laparotomy¹⁶ and robotically assisted laparoscopic correction.¹⁷

CONCLUSION

Chronic uterine inversion is a rare condition that is difficult to diagnose even for the experienced gynecologists. Uterine inversion has a good prognosis when managed in timely correct manner. The treatment for chronic uterine inversion is surgical that includes both abdominal and vaginal approaches.

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