VOLUME-7, ISSUE-2, FEBRUARY-2018 • PRINT ISSN No 2277 - 8160

Original Research Paper

Gynaecology

CHRONIC NON-PUERPERAL UTERINE INVERSION (CNPUI): A RARE CASE REPORT

Dr. Reetam Singh Senior Resident at PMC Hospital, Pune. M.S. (OBGY) Grant Medical College & J. J. Hospital, Mumbai.

Dr. Ashok Anand Head of Department of Obstetrics & Gynecology, Grant Medical College & J. J. Hospital, Mumbai.

ABSTRACT CNPUI is an extremely rare clinical situation. Most of surgical methods for treating CNPUI involve re-inverting the uterus before either repairing the incision made or proceeding to hysterectomy. Vaginal hysterectomy for CNPUI without re-inverting the uterus poses unique challenges to the surgeon. A 55 year old woman presented with complaints of a mass protruding from vagina, and menorrhagia. On examination, an irreducible mass was felt protruding through the introitus. Fibrous ring was present at the introitus. This ring was incised posteriorly, and tubes and ovaries were found to be in the cup. Inversion was corrected and vaginal hysterectomy was done. CNPUI is a diagnostic challenge in gynecology. Leiomyoma is known to cause uterine inversion in 78-85% of the cases. Repositing the uterus may not be possible in all cases, leaving vaginal hysterectomy as the only option.

KEYWORDS : fibroid, inversion, puerperal

Introduction

Chronic non-puerperal uterine inversion (CNPUI) is a rare clinical situation, representing about one-sixth of all inversions. Prolapsed fibroid tend to be the most common inciting factor in 78-85% of cases. Other less common causes are endometrial polyps and inversion associated with leiomyosarcoma1. The preoperative diagnosis of non-puerperal uterine inversion is often a challenge for gynecologist and requires a high index of suspicion. It is a gynecological problem which is treated exclusively by surgery and the type of surgery depends on the desire for future fertility by the patient. Thus, uterus sparing surgical treatment is ideal in those patients, in whom fertility needs to be preserved. Most of the surgical methods described for treating chronic uterine inversion involves re-inverting the uterus before either repairing the incision made or proceeding to hysterectomy. The following is a case report of a woman who presented with non-puerperal uterine inversion secondary to a prolapsed submucous fibroid, managed by vaginal hysterectomy.

Case Presentation

A 55 Year rural woman was referred from a district hospital, to our emergency department, for prolapse uterus. Her symptoms included something coming out per vagina since 1 year with history of on and off bleeding from the mass, fever on and off and history of crampy lower back pain. Patient had history of three blood transfusion at the district hospital.

She was menopausal since one year. Her obstetric history included two term vaginal deliveries, both uneventful. There was no history of any medical or surgical illness in the past.

On physical examination, she was afebrile, with cachexic built and had pallor. Vital signs were within normal limits.

On vaginal examination, there was an approximately 10 cm irreducible mass, with sloughing surface, protruding through the introitus. It was beefy red in appearance and fingers could be approximated above the mass. The mass could not be reposited back, cervix could not be identified separately, and uterus was not felt in the pelvis on bimanual examination. There was no active bleeding. Urethral meatus was normal in position.

She was started on broad spectrum antibiotics. Lab investigations revealed Hb of 8gm %, after which one unit of blood transfusion was given. Vaginal views of the mass are shown in figure 1. On USG pelvis, the uterus couldn't be identified in pelvis and there was a fibroid of 7.4x5.2x4.6cm size.

She was taken for vaginal hysterectomy under spinal anesthesia. On examination under anesthesia, there was a 10 cm mass hanging below the introitus, with a tight fibrous ring present at the introitus. First, the fibrous ring was incised posteriorly at the introitus, posterior pouch was opened up, ovaries and tubes were found in the cup. Posterior wall of the uterus was opened up to the fundus, inversion of the uterus confirmed, then we proceed to the vaginal hysterectomy. First, the bilateral cornual ligaments were clamped, cut and ligated, followed by the uterine and uterosacral ligaments. As bladder was high up, so it wasn't required to push it up. Both cornual ligaments were tied together and anterior peritoneum was closed over it. Pouch of Douglas was obliterated, uterosacral pedicles were tied together and vaginal vault closure was done. Post operatively, urine was clear and urine output was good. One unit blood transfusion was given intraoperatively. Histopathology report was suggestive of leiomyoma of uterus with myxoid degeneration. Patient was discharged on day 10.

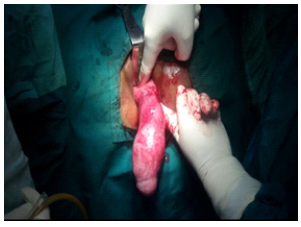

Figure 1: preoperative findings.

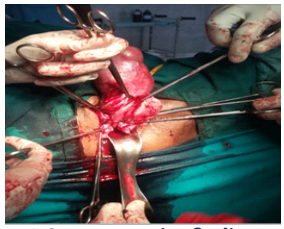

Figure 2: Intra operative findings, after cutting fibrous ring posteriorly.

Discussion

Though non-puerperal uterine inversion is uncommon, high index of suspicion for diagnosis and clear knowledge about gynecological surgery will permit a successful outcome.

The only identified cause of uterine inversion is a uterine pathology. In a completely inverted uterus, the cervix will be invisible and flushed with vagina, which predisposes the cervix for super-infection. The uterus, when fully inverted, generates tension on the vaginal wall, bladder, urethra and the urinary tract in general.

In general, misdiagnosis of CNPUI for other benign and malignant conditions is common.

The diagnosis is easier, where a protruding mass is seen without definite margins of the cervix and absence of uterine body on bimanual examination. In some cases, where diagnosis is difficult clinically, CT (Computed tomography) and MRI (Magnetic resonance imaging) 2 have been shown to be useful diagnostic tools.

Many surgical techniques have been described in the management of non-puerperal uterine inversion, abdominally those of Huntington and Haultain, and vaginally those of Kustner3 and Spinelli.

Most surgeons use the abdominal route for hysterectomy. With some basic skills of reposition techniques, vaginal hysterectomy could be carried out briskly and safely. In the case that we present, the objective was to perform a vaginal hysterectomy with Kustner's technique as a guiding principle. After dissecting the bladder away and opening the peritoneum, a longitudinal incision toward the fundus was made, as in Kustner's, and then infundibulo-pelvic ligaments were clamped .The rest was the standard vaginal hysterectomy procedure.

Conclusion

Chronic uterine inversion is a rare condition that is difficult to manage even for experienced gynecologist. In chronic non-puerperal uterine inversion, surgical treatment is the only option, which includes both abdominal and vaginal approaches. Repositioning the uterus may not be possible in all cases, leaving vaginal hysterectomy as the only option.

Ethical approval

Written informed consent was obtained from the patient for publication of this case report and accompanying images.

References

1. Takano K, Ichikawa Y, Tsunoda H (2001) Uterine inversion caused by uterine sarcoma: a case report. Jpn J Clini ONCOL 31:39-42.
2. Lewin JS, Bryan PJ: MR imaging of uterine inversion. J computer Assist Tomogr 1989, 13:357-359.
3. Safdarian L, Aleyassin A, Forootan M, Kamalin N, Ahmadzadeh A Non puerperal uterine inversion: a case report. Acta Medica Iranica 2003; 41(1):59-61.