Non-puerperal acute inversion of uterus is a rare complication that occurs as a complication of intra uterine tumors, especially big sub mucous leiomyoma. It is so rare that many gynecologists may not encounter such a case in their life time professional career. This condition causes severe pain, vaginal bleeding and shock. Management consists of manual reposition through cervical ring or surgical corrective measures. We report a case of acute uterine inversion in a 42 years lady due to big sub mucous fibroid. This case was initially managed by vaginal myomectomy then uterus was repositioned by Haultain’s technique, which was abdominal hysterectomy.

Keywords: leiomyoma, non-puerperal, uterine inversion.

Non- puerperal Acute Uterine Inversion

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INTRODUCTION

Uterine inversion is an unusual entity and may be classified as puerperal or obstetric and non-puerperal or gynecological inversion. Non puerperal inversion is very rare. It occurs chiefly when uterus tries to expel a sub mucous leiomyoma with fundal attachment1, 2 but endometrial carcinoma and sarcoma may have the same effect.3,4 Risk factor for uterine inversion includes fundal attachment of tumors, thickness of the pedicle, tumor size, thinning of the uterine wall and dilatation of cervical canal.5 Non puerperal uterine inversion is often chronic although Das P has reported 8.6% of non-puerperal uterine inversion as sudden onset.6 This reported case is non puerperal acute inversion caused due to huge sub mucous leiomyoma. We have reported this case due to its rare occurrence.

CASE

A 42 years P2+0, lady with last child of 15 years admitted in on 7th September 2013 with history of severe vaginal bleeding, lower abdominal pain and something coming out per vaginum. She was suffering from menorrhagia and dysmenorrhea for last two years. Two weeks earlier an ultrasound report revealed a bulky uterus with an 80mm x 50 mm x 50 mm sized fundal submucous fibroid. On examination her pulse was 110/min, BP was 80/60 mm of Hg and she was severely pale.

Per abdominal examination revealed no abnormality. On vaginal examination a large necrotic mass (10 cm x 8 cm) attached to a pedunculated globular smooth surface mass (suggestive of leiomyoma) which was protruding from introitus (Figure 1).

Figure 1. Non-puerperal acute uterine inversion due to huge submucous fibroid.

Mass was firm in consistency along with fragile and necrotic area. The cervix could be appreciated. A cup shaped depression felt instead of uterine fundus on
per rectal examination. Hence clinical diagnosis of acute uterine inversion was made.

The patient was in shock hence she was resuscitated first and then appropriate surgery was done. At first we performed vaginal myomectomy with vasopressin injection. The leiomyoma weighed about 200 grams. As the uterine inversion could not be corrected, emergency laparotomy was performed and the inversion was corrected by Haultain’s procedure. Then total abdominal hysterectomy with bilateral salpingo-oophorectomy was done.

The postoperative period was and uneventful. Histopathology of the tumor revealed a necrotic leiomyoma. She recovered fully and resumed her normal business after two weeks.

**COMMENT**

Non-puerperal uterine inversion is extremely rare representing only one sixth of all inversion.\(^7\) Nonpuerperal uterine inversions are usually caused by intrauterine tumors. Mwinyoglee et al reported that 97.4% of uterine inversion associated with tumors, out of which 20% were malignant.\(^8\) Takano et al summarized 88 reported cases of non-puerperal uterine inversion, of which 20% were malignant. This emphasizes the need to perform biopsies prior definitive treatment.

Risk factors for uterine inversion include fundal attachment of tumors, thickness of tumor pedicle, tumor size, thin uterine wall and dilatation of cervix according to Lascarides et al.\(^5\) Our case had the similar risk factors. Cases of uterine inversion are usually chronic but 8.6% presented with sudden onset.\(^6\) This case occurred acutely. This rare case is often difficult to diagnose.\(^10\) Symptoms associated with non-puerperal uterine inversion is vaginal bleeding, vaginal tumor, lower abdominal pain, and urinary disturbance. Our patient presented with shock, which is sometimes associated with puerperal uterine inversion.

MRI, CT scan and USG are useful diagnostic tools. MRI can examine the characteristic image of uterine inversion.

The morbidity and mortality associated with uterine inversion correlate with the degree of hemorrhage, the rapidity of diagnosis and the effectiveness of treatment. Delay in treatment of acute uterine inversion causes dense constriction ring formation, progressive edema, hemorrhage, and tissue necrosis, thus uterus cannot be repositioned by vaginal manipulation.

In our case the reposition was not possible even after vaginal myomectomy and hence a laparotomy was imperative. By using Haultain’s procedure reinversion was successful total abdominal hysterectomy with bilateral salpingo-oophorectomy was done in the same setting.

**CONCLUSIONS**

Non puerperal uterine inversion is very uncommon clinical condition hence it is a diagnostic challenge. When it encounters one has to be managed with little or no previous experience. It can be fatal if not managed properly. With the tumor protruding from vagina or through vulva, we must consider uterine inversion unless proved otherwise.

Nonpuerperal uterine inversion may occur in malignant cases, so pre-operative diagnosis is essential. High index of suspicion is always required for proper diagnosis and a successful outcome.

**DISCLOSURE**

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**REFERENCES**


