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Case Report

A rare case of abnormal uterine bleeding in a perimenopausal woman with chronic uterine inversion caused by extrusion of benign fundal submucosal fibromyoma

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ABSTRACT

Uterine inversion secondary to a pathological process of the myometrium is very rare. We report the case of a 48-year-old woman presenting with abnormal uterine bleeding (AUB) and mass like sensation in vaginal canal, in whom a study by MRI demonstrated a uterine inversion with submucosal pedunculated leiomyoma. She had undergone total abdominal hysterectomy (TAH) and ovaries were preserved bilaterally.

Keywords: AUB, Chronic uterine inversion, Submucosal fibroid, Non-puerperal

INTRODUCTION

Chronic uterine inversion of the nonpuerperal uterus is an uncommon event, and very few cases have been reported in the literature till date. On an average a gynaecologist may only see one case in their lifetime. Chronic nonpuerperal uterine inversion is often associated with uterine pathology. Prolapsed fundal submucosal fibroids tend to be the most common inciting factor, however occasional reports of uterine inversion associated with uterine neoplasm and endometrial polyps have also been found. Three contributing factors proposed for uterine inversion are: 1) sudden emptying of uterus which was previously distended by a tumour 2) thinning of the uterine walls due to an intrauterine tumour and 3) dilatation of cervix.[1] The diagnosis of nonpuerperal uterine inversion is often difficult and requires high index of clinical suspicion.

The following is a case report of a perimenopausal woman who presented with menometrorrhagia and chronic uterine inversion, ascribed to the fundal submucous uterine myoma.

CASE REPORT

A 48 years old lady, para 3+0 (with three living children), presented to the GOPD of Silchar medical college and Hospital with complaints of dull low back ache and sensation of heaviness in vagina along with history of menorrhagia and episodes of intermenstrual bleeding since past three months. She was a known hypertensive on regular medication. She had no bowel symptoms but had dysuria and frequency. On general examination, she had pallor and normal BP. On abdominal palpation, no lump could be felt. On per speculum examination, it revealed a huge beefy red mass occupying the upper 2/3rd of vagina, cervix could not be seen separately. On digital examination, the mass was well circumscribed of size approximately 6×5 cm and it was friable and blooded on touch. Cervix could not be felt. Uterine size could not be assessed. On per rectal examination, uterine body could not be felt, a cup like depression was felt. On sound test, uterine sound could not be passed. On TAS, a well-defined hypoechoic homogeneous solid lesion was noted to occupy the entire cervix, measuring 9×8 cm with capsular vascularity on Doppler, suggestive of cervical fibroid. There was thickening of endometrium. Size of the uterus

was normal. MRI was done subsequently for better correlation, which showed a pedunculated mass, arising from anterior aspect of uterus near the fundus, presenting with homogeneous signal, identical or hypointense in comparison with uterine myometrium prolapsing through cervix down to the vagina. Its surface had the same signal as the endometruim. Fundal dimpling was seen, fundus of uterus extending beyond the cervix. The MRI suggested a complete uterine inversion; Thus, we made the diagnosis of chronic uterine inversion with submucosal fibroid.

Patient was admitted and routine investigation work up was done. Her Hb was 7.5 gm% and TLC was raised (17,000/mm^3), urine R/E showed pus cells+. She received a 7-day course of antibiotics tab ciprofloxacin 500 mg BD, tab tranexamic acid 500 mg BD and also 2 units PRBC. Patient had undergone total abdominal hysterectomy after she was hemodynamically stable. In intraop, after opening layers of abdomen, a cup like depression was noted in the mid pelvic cavity and bilateral round ligaments, fallopian tubes and ovarian ligaments were coming out of the cup like depression. On cut section, whorled appearance of muscle fibres and fibrous tissue seen. Patient received one-unit PRBC in her immediate postop. Her postoperative period was uneventful and was discharged on 10th post-operative day. On HPE, benign leiomyoma with foci of hyaline degeneration was seen.

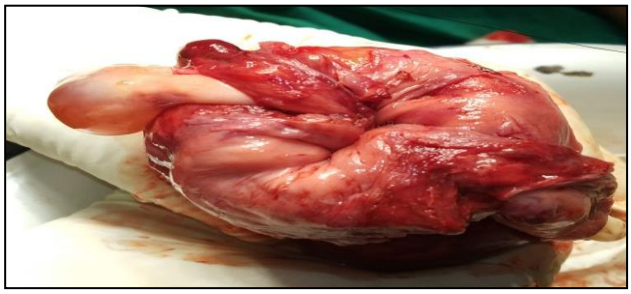

Figure 1: View of the specimen of uterine inversion post laparotomy. There is characteristic dimpling and in-turning of the fallopian tubes and round ligaments.

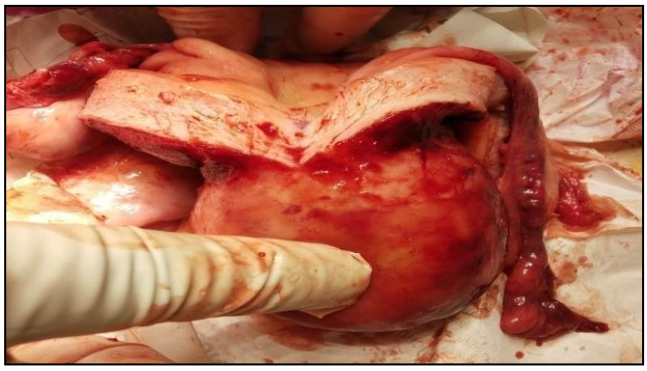

Figure 2: Postop specimen of inverted uterus with submucosal fibroid. Endometrial surface is seen. Large myoma abutting from the uterine fundus. Small dissection done in uterus shows no visible intramural component.

DISCUSSION

Uterine inversion is a rare event either puerperal or nonpuerperal, with only few case reports. This is because the cases are missed if the inversion is not complete and is chronic.

The degree of inversion can be classified into incomplete, complete or total. In the incomplete form, the uterine fundus descends inferiorly but not through the cervix. In a complete inversion, fundus and corpus extends through the cervix. In a total inversion, vagina is also inverted. In our case it was a complete type. Diagnosis is always not easy. Acute forms are mostly symptomatic while chronic form can be asymptomatic or associated with pelvic pain with a sensation of heaviness or per vaginal bleeding. On physical examination, a vaginal mass can be detected, but the uterus is not palpable by bimanual examination.

Imaging procedures such as ultrasound and MRI assist the diagnosis. Ultrasound being the first line imaging investigation. The suggestive features include fundal indentation and depressed longitudinal groove extending from the uterus to the centre of the inverted uterus. MRI is complimentary to USG findings. The features include: U shaped uterine cavity, thickened and inverted uterine fundus on sagittal section and bull's eye configuration on axial image.[2] In our case, ultrasound was not of diagnostic assistance; it was only MRI of the pelvis that allowed a diagnosis of uterine inversion secondary to submucosal leiomyoma.

In non-puerperal uterine inversion, treatment is guided by whether the condition is acute or chronic, reproductive wish of the patient and the cause of inversion (benign or malignant). Whereas, the efficacy of non-surgical methods is not clear, surgery is imperative in chronic inversion unlike in acute inversion, where manual repositioning is possible. The surgical methods include: surgical repositioning via abdominal or vaginal approach and proceeding to hysterectomy or outright hysterectomy

Spinelli and Kustner are similar trans-vaginal surgical reposition techniques. On the other hand, Huntington procedure and Haultain procedure are repositioning performed trans-abdominally via laparotomy.[3]

As our patient was perimenopausal and had her family completed we did total abdominal hysterectomy in our case. This case taught us to think of uterine inversion in a patient with per vaginal bleeding and mass-like feeling in the vaginal canal, even though there was discrepancy between the clinical features and ultrasonographic findings initially.

CONCLUSION

Uterine inversion secondary to uterine pathology is a very rare gynaecological condition because of which it is easily misdiagnosed. A high index of suspicion is needed for its

proper diagnosis. If timely managed, it has an excellent prognosis.

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