



A CASE REPORT OF NON-PUERPERAL UTERINE INVERSION DUE TO SUBMUCOSAL LEIOMYOMA.

Dr. Ramesh Parate	MD, Professor, Department Of Radiodiagnosis, Government Medical College And Hospital Nagpur.
Dr. Ajay K Pokale *	Junior Resident, Department Of Radiodiagnosis, Government Medical College And Hospital Nagpur. *Corresponding Author
Dr. Rachit Thavanani	Junior Resident, Department Of Radiodiagnosis, Government Medical College And Hospital Nagpur.
Dr. Niveditha Nairy	Junior Resident, Department Of Radiodiagnosis, Government Medical College And Hospital Nagpur.
Dr. Rohit M Shinde	Junior Resident, Department Of Radiodiagnosis, Government Medical College And Hospital Nagpur.

ABSTRACT

Although leiomyomas are the most common gynecologic disorders, non-puerperal uterine inversion is a rare gynecologic complication that is encountered contrary to puerperal uterine inversion. We report a case of 38 year old woman, hemodynamically stable at presentation, with acute uterine inversion caused by a fundic submucosal myoma. The patient was treated by Hultain's procedure. Diagnosis of non-puerperal uterine inversion is rare and difficult, often needs imaging assistance. NP-UI being a medical and surgical emergency makes it all the more important to be diagnosed with more precision.

KEYWORDS : Uterine Inversion, Non Puerperal, Leiomyoma.

INTRODUCTION

Uterine inversions are divided into two groups: a) puerperal, b) non-puerperal. Non-puerperal inversions are rare and often due to complication of sub-mucous leiomyoma that dilates cervix and protrude into vagina. Clinical features can range from irregular per-vaginal bleeding, anemia to vasovagal attack. In long standing cases, ureterovaginal fistula and urinary retention can occur. Imaging techniques like MRI and ultrasound are used to complement the diagnosis and also to establish surgical planning and approach. (1)

Treatment varies based on the severity of the symptoms and past medical history. Vaginal myomectomy or hysterectomy is usually indicated in cases that have ruled out malignancy. For uterine inversion caused by malignancy, advanced surgery such as radical abdominal hysterectomy is indicated(2).

Imaging Protocol

Transabdominal sonography of pevic region in transverse and axial planes.

MRI PELVIS WAS DONE ON – SEIMENS SYNGOVIA MANETOM VIDA 176507 3T MRI. T2/T1 sequence covering the paraortic regions were performed. Oblique sequence perpendicular to the short axis of the uterine corpus, slice thickness ≤ 4 mm for axial or axial oblique sequence was used. In contrast, the use of gadolinium-enhanced T1WI FS sequence was used. DCE MRI was used diffusion weighted imaging (DWI) was of female pelvic MRI.

Case Report

A 38year old multiparous woman presented with abnormal vaginal bleeding, light headedness and mass protruding from her cervix. The mass initially thought to be cervical polyp later diagnosed as prolapsed submucosal myoma. Haultain procedure which involves making an incision in the posterior surface of the uterus to bisect the constriction ring in the myometrium and dissection of submucosal degenerated fibroid from the fundal attachment was performed. Later, subtotal hysterectomy was also performed in the same setting. Pathological examination revealed a myoma.

Representative Figure:

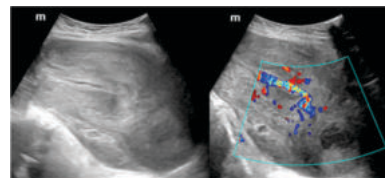


Image1. Transabdominal sonogram showing endometrial pseudostripe represented by two opposing serosal surfaces.

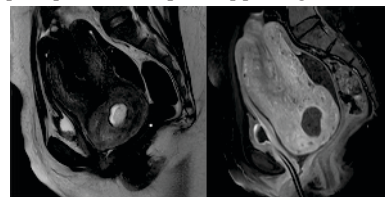


Image 2: On sagittal MR T2w and post contrast images, depressed uterine fundus showing preserved zonal anatomy with a well defined homogeneously enhancing rounded mass (likely fibroid) is seen at the uterine fundus which is seen inferiorly in the inverted uterus.

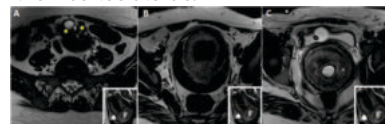


Image 3 : MRI axial images of T2w sequences show (A) Centrally placed ovaries with round ligaments and fallopian tubes bulging centrally out the top of the uterus. (B) bull's eye sign- constricting myometrial ring (C) hemorrhagic cystic area within myoma with T2 shading.



Image 4: Operative view (1) shows dimpled uterine fundus with round ligaments and fallopian tubes bulging centrally out the top of the uterus. External view (2,3) showing the well

defined mass with hemorrhagic cysts within.

DISCUSSION

The uterine inversion happens when the uterus retracts to expel the submucous myoma with fundal attachment. By extirpating the stalk the fundus was also resected, causing a uterine inversion and also rupture. (3)

Unlike the cases of puerperal uterine inversion which present with torrential vaginal bleeding, non-puerperal uterine inversion follows a more indolent course. However, but in our case, the patient however presented with heavy vaginal bleeding and light headedness. The diagnosis of uterine inversion is often not readily made by physical examination alone. Thus making the diagnostic imaging techniques take the front seat. Clinical suspicion of acute uterine inversion is often made in the setting of a woman complaining of acute pain abdomen and uterine fundus not being appreciated on bimanual examination. Whereas the chronic form of uterine inversion has a more insidious course with symptoms ranging from vague heaviness to urinary incontinence. (4) Ultrasound and MRI are frequently the chosen modalities for the evaluation of irregular or heavy per vaginal bleeding. (5) Although MRI is often chosen as the imaging modality of choice accounting to its excellent soft tissue resolution.

A number of signs have been described to diagnose uterine inversion. On transverse view sonogram, Poorly defined superior part of uterine fundus is seen with Y configuration of uterine cavity secondary to inversion of endometrial lining. Transverse view often shows bull' eye sign owing to central fluid collection with echogenic rim representing inverted endometrial lining. Similar findings have been described in MRI. Most important of the signs is to recognize the round ligaments and fallopian tubes bulging centrally out the top of the uterus with are in fact pulled downwards and medially by the inverting fundus [6].Furthermore, MRI holds an upper hand in that it can characterize the mass involved and depict the changes of the uterus.

CONCLUSION

The NPUI secondary to uterine submucosal fibroid is a very uncommon condition. It remains a diagnostic challenge in gynaecology. NPUI secondary to submucous fibroid sometimes mimic as a cervical fibroid and diagnosed only during surgery. Surgery is the best method for the management of uterine inversion. Associated uterine pathology may alter the type of surgery.

Conflict Of Interest

The authors declare that there is no conflict of interests.

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