

# A Rare Case of Non-Puerperal Post Menopausal Chronic Uterine Inversion

N. Mamata<sup>1</sup>, A. Srikavya<sup>2</sup>

## ABSTRACT

**Introduction:** Chronic non puerperal uterine inversion is a rare condition. In our Institute this is the first case of non- puerperal chronic uterine inversion reported. Non Puerperal uterine inversion is usually precipitated by the tumors located at the fundus of the uterus which exerts traction force to cause the inversion. Uterine inversion are due to submucous fibroid, other causes include endometrial polyp, uterine sarcoma, endometrial carcinoma and mixed mesodermal tumours.

**Case report:** We report a case of 74 year old postmenopausal, P5L1 with all Full term normal vaginal deliveries presented to out patient department of obstetrics & gynaecology, CAIMS, Karimnagar. She presented with mass per vaginum since 1 year. On examination ,patient was stable where her ultrasound and MRI findings revealed uterine inversion. Hysterectomy was done vaginally.

**Conclusion:** Non puerperal uterine inversion is an unusual condition. Clinical diagnosis of this is often not easy and sometimes this situation can prove to be fatal. There shall be a great deal of difficulty when we approach a case of this nature without prior preparation. Surgery to correct chronic inversion of the uterus is challenging. Uterine inversion has a good outcome if diagnosed and managed timely.

**Keywords:** Uterine Inversion, Non Puerperal, Treatment And Surgical Techniques.

## INTRODUCTION

Uterine inversion is defined as descent of uterine fundus through endometrial cavity and cervix and it turns inside out<sup>1</sup>. It may be Complete or partial. Most of the uterine inversions are acute and puerperal<sup>2-7</sup>. Non puerperal inversions are exceptionally rare.

A Non puerperal inversion occurs when the uterus acts to expel a submucous lesion attached to the fundus such as Uterine fibroid, Endometrial carcinoma, sarcoma or polyp.

We report a rare case of spontaneous postmenopausal Uterine Inversion without any significant underlying pathology.

- Non puerperal inversions are described in very few patients and requires prompt diagnosis. They represent about one sixth of all inversion cases<sup>7</sup>. Because of the rare occurrence of nonpuerperal uterine inversion most gynaecologist may not have an opportunity to see such a case in their life time<sup>8</sup>.

## CASE REPORT

A 74 year old postmenopausal, P5L1 with all Full term normal vaginal deliveries presented to our hospital (Chalmeda Anand Rao institute of medical sciences) on 28th August 2021, with mass per vaginum since 1 year, initially she noticed mass per vaginum on straining during

defecation, then she had spontaneous protrusion of mass outside the introitus. Mass was irreducible with bleeding on touch and also associated with foul smelling discharge. She also complained of Burning micturition and there were no bowel symptoms.

### Abdominal examination was normal.

On examination, an infected fleshy reddish-brown mass of size 6x6cm, which is inverted pear shaped is seen protruding through the introitus (as shown in Fig 2). It has foul smelling & Purulent discharge over its surface. Mass was placed inside the vagina and on bimanual examination uterine fundus was not palpable in pelvis and cervix also could not be palpated and hence the uterine sound could not be passed. Mass was non tender, firm in consistency and bleeds on touch. On Rectal Examination Uterus could not be palpated. Rectal mucosa was free. External urethral meatus is normal. Patient is known case of hypertension, on treatment.

### Patient was admitted and investigated.

Ultrasound of Abdomen and pelvis was done. Window through bladder showed no uterus within the pelvis. On angulating the probe downwards, vaginal walls could be made out and mass extending down from walls was seen, which had a hypoechoic line seen extending from pelvis into mass(as shown in Fig 3). Midline endometrium echo not visualized, suggestive of uterine inversion .

MRI-pelvis was also done, findings were confirmative for uterine inversion( as shown in Fig 1).

All other investigations were within normal limits. Patient was put on broad spectrum antibiotics and antiseptic packing was done for 1 week. Patient was posted for surgery. Before the start of surgery examination under anaesthesia was done and uterine inversion was confirmed.

Surgery was performed by vaginal route. After opening vaginal flaps, vertical incision was given from fundus on posterior wall and round ligaments tubo-ovarian ligaments were clamped, cut and ligated. then, uterine vessels, mackenrodt's ligaments were clamped, cut and ligated.

<sup>1</sup>Professor, Department of Obstetrics and Gynaecology, Chalmeda Anand Rao Institute of Medical Sciences, Karimnagar, Telangana,

<sup>2</sup>Final year PG, Department of Obstetrics and Gynaecology, Chalmeda Anand Rao Institute of Medical Sciences, Karimnagar, Telangana, India

**Corresponding author:** Dr. A. Srikavya, Final year PG, Department of Obstetrics and Gynaecology, Chalmeda Anand Rao Institute of Medical Sciences, Karimnagar, Telangana, India

**How to cite this article:** Mamata N, Srikavya AA rare case of non- puerperal post menopausal chronic uterine inversion. International Journal of Contemporary Medical Research 2021;8(12):L1-L3.





**Figure-1:** MRI showing findings of uterine inversion through the introitus



**Figure-2:** Showing infected fleshy reddish-brown mass protruding



**Figure-3:** USG showing hypoechoic line seen extending from pelvis into mass

Specimen removed and vault was closed. Postoperative period was uneventful. Histopathology of specimen showed endometrial hyperplasia without atypia.

## DISCUSSION

Chronic non puerperal uterine inversion is a rare condition in women with less than 200 cases reported in the literature since 1887. In our Institute this is the first case of non-puerperal chronic uterine inversion reported.

Non Puerperal uterine inversion is usually precipitated by

the tumors located at the fundus of the uterus which exerts traction force to cause the inversion.

Uterine inversion are due to submucous fibroid, other causes include endometrial polyp, uterine sarcoma, endometrial carcinoma and mixed mesodermal tumours<sup>9,10</sup>.

A Classification of genital inversion has been described :

**Stage 1:** Inversion of the uterus is intrauterine or incomplete. The fundus remains within the cavity

**Stage 2:** Complete inversion of the uterine fundus through the fibromuscular cervix.

**Stage 3:** Total inversion, where by the fundus protrudes through the vulva

**Stage 4:** The vagina is also involved with complete inversion through the vulva along with an inverted uterus<sup>11</sup>

This case is unique because there was no demonstrable obvious pathology which caused inversion, like submucous fibroid /any tumor/polyp. But after surgery, specimen showed endometrial hyperplasia without atypia which may be a rare cause of inversion at her age of 74 years.

Various surgical methods for treatment for chronic uterine inversion have been described in literature. Huntington's operation and Haultain's operations are done by abdominal route, while Spinelli's and Kustner's technique are done vaginally<sup>11,12</sup>.

But based on our experience with this surgery we can conclude that each case has to be approached differently based on the need. We have done the surgery by vaginal route. After opening vaginal flaps, vertical incision was given from fundus on posterior wall, round ligaments and tuboovarian ligaments were clamped, cut and ligated. then, uterine vessels, mackenrodt's ligaments were clamped, cut and ligated. Specimen removed and vault was closed. postoperative period was uneventful.

## CONCLUSION

Non puerperal uterine inversion is an unusual condition. Clinical diagnosis of this is often not easy and sometimes this situation can prove to be fatal.

A high index of suspicion is necessary for the diagnosis. One of the most difficult conundrums even for the experts. There shall be a great deal of difficulty when we approach a case of this nature without prior preparation.

Surgery to correct chronic inversion of the uterus is challenging. Uterine inversion has a good outcome if diagnosed and managed timely.

## REFERENCES

1. Lai FM, Tseng P, Yeo SH, Tsakok FH. Non-puerperal uterine inversion—a case report. *Singapore Med J.* 1993;34:466-468.
2. Shivanagappa M, Bhandiwad A, Mahesh M. A Case of Acute on Chronic Uterine Inversion with Fibroid Polyp. *Journal of Clinical and Diagnostic Research* 2013;7:2587-2588.
3. Atalay MA, Demir BC, Solak N, Atalay FO, Küçükkömürçü S. An unusual presentation of a submucous leiomyoma accounting to a non- puerperal

- uterine inversion. *J Turkish-German Gynecol Assoc* 2013;14: 116-118.
4. Kilpatrick CC, Chohan L, Maier RC. Chronic nonpuerperal uterine inversion and necrosis: a case report. *J Med Case Rep* 2010;4: 381.
  5. Katdare P, Valecha SM, Gandhewar M, Dhingra D. Chronic Non- Puerperal Uterine Inversion: Recommendations for Diagnosis and Management. *Global Journal of Medical research Gynecology and Obstetrics* 2013;13:45-47.
  6. Rudra BS, Naredi N, Duggal BS, Seth A. Chronic Uterine Inversion: A Rare Complication of Mismanaged Labour. *Indian Journal of Applied Research* 2010;3:91-92.
  7. Gomathy E, Agarwal Y, Sreeramulu PN, Sheela SR. Non-puerperal uterine inversion with an ovarian tumor -a rare case. *Int J Pharm Biomed Res* 2011;2:74-75.
  8. Darji P, Banker H, Gandhi V, Hakkar G. Postmenopausal woman with vaginal mass: do not forget to see for uterine inversion. *BMJ Case Reports*. 2012;12:34-39.
  9. Thakur A, Agrawal A, Basnet P, Uprety DK. Chronic uterine inversion secondary to submucous fibroid. *Health Renaissance*. 2012;10:242-3.
  10. Eigbefoh JO, Okogbenin SA, Omorogbe F, Mabayoje PS. Chronic uterine inversion secondary to submucous fibroid: a case report. *Niger J Clin Pract*. 2009;12:106-7
  11. Spinelli PG. Inversion of the uterus. *Riv Ginec Comtemp*. 1897;11:567-570.
  12. Rocconi R, Huh WK, Chiang S: Postmenopausal uterine inversion associated with endometrial polyps. *Obstet Gynecol*. 2003;102: 521-523.

**Source of Support:** Nil; **Conflict of Interest:** None

**Submitted:** 06-11-2021; **Accepted:** 20-11-2021; **Published:** 31-12-2021