

An Interesting Case of Non-Puerperal Uterine Inversion in Cadaver-A Case Report

Jeneeta Baa

Assistant Professor, Department of Anatomy, GVP Institute of Health Care and Medical Technology, Visakhapatnam, Andhra Pradesh, 530048, INDIA.

ABSTRACT: Uterine inversion is defined as the turning inside out of the fundus into the uterine cavity. It may be acute or chronic. Inversion of the uterus is an extremely rare condition in obstetric emergency and a rarest thing to be seen in a cadaver. It has never been reported so far as a cadaveric finding. During routine dissection in a 65-year-old female cadaver the fundus of uterus was not seen and the uterus was turned inside out. There was prolapse of the fundus through the uterine cervix. Non- puerperal uterine inversion is a rare happening with a very few clinicians encountering it in their entire clinical practice. Since it is a diagnostic dilemma, this case reporting may help in spreading awareness of its occurrence which may save the patient from undergoing a hysterectomy.

Keywords: Bulls eye, Hysterectomy, Inversion, Leiomyoma, Non- puerperal

Date of Submission: 16-07-2018

Date Of Acceptance: 30-07-2018

I. Introduction

Uterine inversion is defined as the turning inside out of the fundus into the uterine cavity. Uterine inversion is categorized as puerperal or obstetric and non- puerperal or gynecological complication. Puerperal uterine inversion occurs as obstetrical emergency due to the mismanaged third stage of labor. Non- puerperal uterine inversion is very rare [1]. It occurs when the uterus acts to expel a sub-mucous leiomyoma with fundal attachment [2,3] but an endometrial carcinoma or sarcoma may also have the same effect

II. Case Report

During routine dissection of abdomen and pelvis we noted inversion of uterus in an approximately 65 years old female cadaver. There was prolapse of the fundus through the uterine cavity. The fundus was not visible, instead a dimple with a constriction ring was seen posterior to the bladder. The distal ends of both the tubes and the ovaries along with the round ligaments protruded through the constriction ring. The broad ligament was in normal position. Externally the body and cervix uteri also appeared normal.

III. Discussion

Inversion of the uterus is an uncommon condition. It is encountered as an obstetric emergency and is a diagnostic challenge. Uterine inversion may be classified as puerperal or obstetric and non- puerperal or gynecological. Non- puerperal uterine inversion may be classified into acute or chronic based on the mode of onset and evolution. Acute is more dramatic and characterized by severe pain and hemorrhage whereas chronic is insidious in onset with chronic vaginal discharge and irregular uterine bleeding leading to anemia with a feeling of something coming down the vagina [4]. Chronic variety is of two types, incomplete and complete. It is said to be incomplete when fundus protrudes through the cervix and lie inside the vagina whereas complete is when the whole of the uterus including the cervix are inverted.

Non- puerperal uterine inversion is usually caused by intrauterine tumors. Of the 77 cases reported, 97.7% were associated with tumor and 20% of these tumors were malignant [5]. Leiomyomas are the commonest among the tumors accounting 71.6% of cases, with occasional reports of inversion being associated with uterine neoplasm and endometrial polyps [6]. The major factors that contribute to its occurrence are 1) Tumor attachment site 2) Thickness of the tumor pedicle 3) Tumor size 4) Thinning of the uterine walls 5) Dilatation of the cervix.

Uterine inversions can be classified into four stages:

Stage 1 - The inverted uterus remains in the uterine cavity

Stage 2 – Complete inversion of the fundus through the cervix

Stage 3 – The inverted uterus protrudes through the vulva

Stage 4 – Inversion of uterus and vaginal wall through the vulva [7,8]

All cases of non-puerperal uterine inversions are usually chronic but 86% present with sudden onset. Rarely if the patient survives such a condition and diagnosis is not previously established the condition may be detected months later, during the evaluation of a bloody discharge. This is called chronic inversion [9,10]. The diagnosis is easier with stage 3 and 4, in which a protruding mass is seen per speculum examination along with an absent uterus in bimanual or per rectal examination. The differential diagnosis of something coming down the vagina should be meticulously dealt with in order to avoid diagnostic pitfall. The diagnosis of chronic uterine inversion is difficult, especially if the inversion is incomplete. The morbidity and mortality associated with uterine inversion correlate with the degree of hemorrhage, the quickness in diagnosis and treatment of choice. It carries a good prognosis if managed timely and in a correct manner. Ultrasound and CT scan have become a necessity in diagnosis. In T2 weighted MRI scans, a 'U' shaped uterine cavity and a thickened and inverted fundus on a sagittal image and a 'bullseye' configuration on an axial image are signs indicative of uterine inversion [11]. Management of this condition depends on the child bearing desire of the patient. The operative procedures for the treatment of chronic uterine inversion are Huntington and Haultain's procedure which are abdominal surgeries, Spinelli and Kustner's operation with vaginal approach [12].

IV. Conclusion

Non-puerperal uterine inversion is extremely rare, representing about one sixth of all inversions [13] such that most of the gynecologists won't see such a case in their lifetime. This case is reported due to its rare occurrence so that awareness of its occurrence might save the patient from undergoing procedures like hysterectomy.

References

- [1]. Rattray CA, Parris CN, Chisholm G, Coard KC. Complete nonpuerperal uterine inversion as a result of a uterine sarcoma. *West Indian Medical Journal* 2000; 49:245-247.
- [2]. Lai FM, Tseng P, Yeo SH, Tsakok FH. Non puerperal uterine inversion: a case report. *Singapore Medical Journal* 1993; 34(5): 466-
- [3]. David H, Nichols, Clyde L, Randall MD. *Vaginal surgery*, 3rd ed. Philadelphia: Williams & Wilkins; 1985. pp. 456-459.
- [4]. Gowri V. Uterine inversion and corpus malignancies: a historical review. *ObstetGynecolSurv* 2000; 55(11):703-707.
- [5]. Krenning RA. Nonpuerperal uterine inversion. Review of literature. *ClinExpObstetGynecol* 1982; 9(1):12-15.
- [6]. Takano K, Ichikawa Y, Tsunoda H, Nishida M. Uterine inversion caused by uterine sarcoma: a case report. *Jpn J Clin Oncol* 2001; 31(1):39-42.
- [7]. Skinner GN, Loudon KA. Non puerperal uterine inversion associated with an atypical leiomyoma. *Aust N Z J ObstetGynaecol* 2001; 41(1):100-101.
- [8]. Salomon CG, Patel SK. Computed Tomography of Chronic Nonpuerperal Uterine Inversion. *Journal Of Computer Assisted Tomography*. 1990; 14(6): 1024-1026.
- [9]. Hanton EM, Kempers RD. Puerperal inversion of the uterus. *Post Grad Med* 1964; 36:541-545.
- [10]. Mwinyogee J, Simela N, Marivale M. Non puerperal uterine inversion . A two case report and review of the literature. *Cent Afri J Med* 1997; 43(9):268-271.
- [11]. Huntington JL. Abdominal reposition in acute inversion of the puerperal uterus. *Am J ObstetGynecol* 1928; 15:34-40.
- [12]. Haultain F. The treatment of chronic uterine inversion by abdominal hysterotomy. *Br Med J* 1901; 2:974-980.
- [13]. Lascarides E, Cohen M. Surgical management of nonpuerperal inversion of the uterus. *ObstetGynecol* 1968; 32(3):376-381.

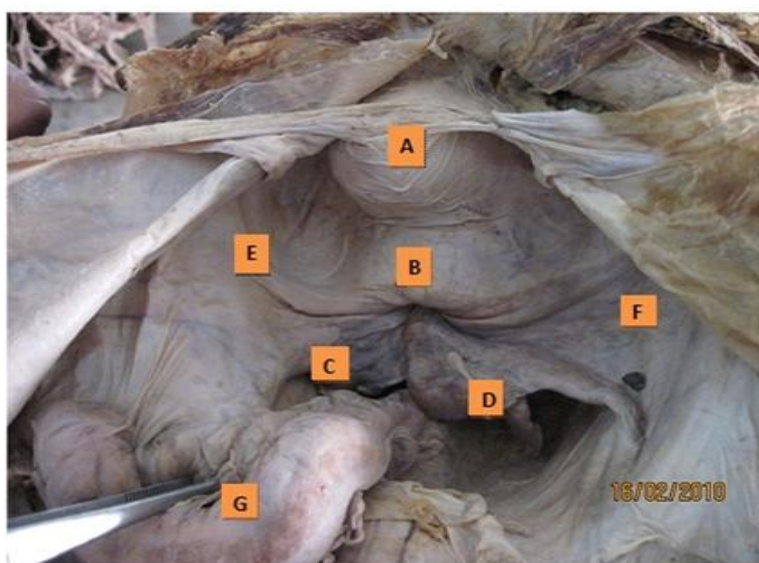


Fig 1: Picture taken from above showing the absence of the fundus of uterus

A- Urinary bladder ,B- Uterus ,C- Left ovary, D- Right ovary, E- Round ligament,
F- Broad ligament, G- Sigmoid colon.

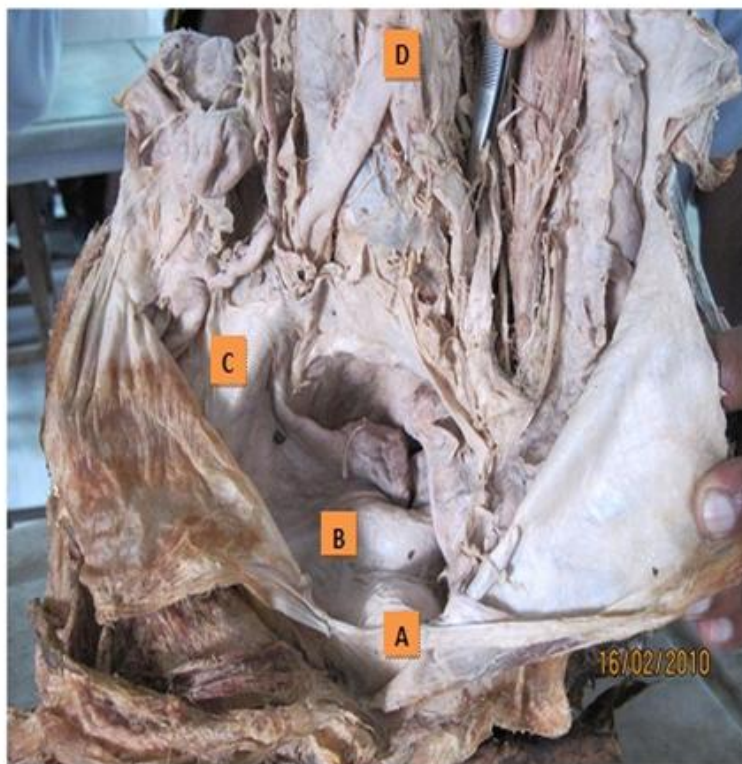


Fig 2: Sagittal section of female pelvis showing the dimple with a constriction ring at the site of fundus of uterus. A-Urinary bladder, B-Uterus, C-pelvic brim, D-Common iliac A.

Jeneeta Baa "Aninteresting Case Of Non-Puerperal Uterine Inversion In Cadaver-A Case Report."IOSR Journal of Dental and Medical Sciences (IOSR-JDMS), vol. 17, no. 7, 2018, pp 70-72.