



**ORIGINAL RESEARCH PAPER**

**Obstetrics and Gynaecology**

**A RARE CASE REPORT OF INVERSION OF ONE HORN OF A BICORNUATE UNICOLLIS UTERUS WITH POST PARTUM HAEMORRHAGE**

**KEY WORDS:** Mullerian anomaly, bicornuate unicollis uterus, uterine inversion, Puerperal inversion of one horn of bicornuate uterus.

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**ABSTRACT**

Uterine inversion during puerperium is rare now a days; inversion of one horn of a bicornuate unicollis uterus is even rarer. Moreover, presence of uterine malformations makes the diagnosis difficult, challenging emergency treatment as well. We present a case of a 32 years old second gravida patient referred to our institute from a peripheral hospital as a case of primary PPH in shock following vaginal delivery. Vaginal examination revealed a soft, red fleshy mass filling the vaginal cavity with bleeding, where as another mass resembling uterine fundus could be felt in the lower abdomen. Emergency USG wasn't confirmatory for any specific diagnosis. A provisional diagnosis of acute uterine inversion with associated subserous pedunculated fibroid / ovarian mass was made on clinical suspicion. Manual reposition was tried under anesthesia but failed, so, patient was put for laparotomy. At laparotomy, it was found to be a case of bicornuate unicollis uterus with inversion of the left horn. It was repositioned with Haultain's procedure. The postoperative period was uneventful and the patient was discharged on the sixth day.

**INTRODUCTION:**

Mullerian duct malformations delineate a miscellaneous group of congenital anomalies that result from arrested development, abnormal formation, or incomplete fusion of the mesonephric ducts. In many patients, uterine congenital anomalies have been related with infertility, recurrent pregnancy loss, prematurity and other obstetric complications which increase perinatal morbidity and mortality rates.<sup>1</sup> Acute uterine inversion is a rare (1:2,500-25,000 deliveries) but potentially life-threatening obstetric complication. Uterine malformation can make it difficult to diagnose and treat this emergency.<sup>2</sup>

**Case Report:**

On 23rd November 2021, at around 11:30 pm we received a patient at the O & G emergency room, who was referred from a peripheral hospital as a case of second gravida with primary PPH in shock. It was approximately 5 hours since her delivery and she had lost a substantial amount of blood already. The resuscitation was started immediately. Requisition for 3 units of blood was sent to the blood bank. The patient had delivered a baby weighing 2.3 kgs at home by a dhai and was taken to the local PHC as placenta wasn't delivered. At the PHC, the doctor delivered the placenta but there was continuous PPH following that, and so, she was referred to this institute. The patient didn't know her LMP. No USG was also available. Her previous child was 5 years old, delivered at home. No history of any complications during last childbirth.

On examination, a soft mass resembling atonic puerperal uterus was felt in the lower abdomen more towards the right side. Vaginal examination revealed a reddish fleshy mass filling the vaginal cavity which was soft in consistency. The cervix wasn't seen. Emergency USG was performed, which showed a puerperal uterus like structure in the abdomen where as another fleshy mass prolapsing into the vagina. A definite diagnosis couldn't be made. The patient was shifted to the operation theatre with a few differential diagnosis in mind- (1) uterine inversion with subserous pedunculated fibroid (2) uterine inversion with ovarian mass (3) Submucosal pedunculated fibroid. 3 units of blood were arranged. Manual reposition was tried under anesthesia, but failed. So decision to perform laparotomy was taken. On opening up the abdomen, to everyone's surprise it came out to be a case of bicornuate uterus with inversion of the left horn along with left tube and ovary. Right horn was the one palpable through the abdomen. Manual reposition was tried once again by pulling from above but couldn't be done. So the posterior cervical ring was incised and the inverted uterine horn was repositioned (Haultain's Procedure). Both the uterine cavities and cervix were examined. It was a bicornuate unicollis uterus. The incised part was repaired and sterilization operation was also done after due consent to prevent any such catastrophe in the future. With uterotonic support and blood transfusion, the patient gradually improved. She was kept in the recovery ward overnight and was shifted to the postoperative ward the next day. Her postoperative period was uneventful and she was discharged on the sixth postoperative day.

**DISCUSSION:**

Inversion of one of the two horns of a bicornuate uterus following delivery is one of the rarest events encountered in obstetrical practice. Very less literature or case reports are available regarding this rare happening. Leisy M.A. and associates mentioned about the difficulties they faced during the diagnosis and management of uterine inversion complicated by an inverted horn at the level of the contraction ring.<sup>3</sup>

In another study by F. Raga and associates, a total of 3181 patients (both fertile and infertile) with mullerian anomalies were analysed which provided new insights into the reproductive potential of mullerian malformations. They found out that the incidence of such anomalies in the infertile population is almost twice as high as in fertile women. Unicornuate and didelphys uteri have a 20-30% chance of impact of congenital mullerian anomalies carrying a pregnancy to term, which is low, and therefore surgery should be recommended in the latter. The reproductive performance



**Fig.1. Bicornuate uterus with inversion of left horn**



**Fig.2. Communicating horns following correction of inversion**



**Fig.3. The uterus at the end of the surgery**

of the bicornuate and septate uteri was found to be higher than expected (live birth rate of 62%)<sup>4</sup>. This particular case is different because she already has an uneventful delivery at term 5 years back, and this time also it would probably had gone unnoticed had there been no inversion of uterus.

**CONCLUSION:**

Inversion of one horn of a bicornuate uterus presents a diagnostic dilemma. From this case study, we learn that when physical examination reveals a palpable abdominal "fundus" and vaginal examination detects a mass protruding through the cervix in a patient who is experiencing postpartum hemorrhage, the cause may be inversion of one horn of a bicornuate uterus. Laparotomy is invariably required for definitive diagnosis and treatment. It also reveals that many major uterine anomalies may go unnoticed with absolutely normal obstetric history.

**REFERENCES:**

1. Raga, F., Bauset, C., Remohi, J., Bonilla-Musoles, F., Simón, C., & Pellicer, A. (1997). Reproductive impact of congenital Müllerian anomalies. *Human Reproduction (Oxford, England)*, 12(10), 2277-2281.
2. Ollendorff, D. A., Kelsey, R. J., & Fejgin, M. D. (1995). Puerperal inversion of one horn of a bicornuate uterus. A case report. *The Journal of Reproductive Medicine*, 40(8), 601-602.
3. Leisy, M. A., Lipshitz, J., & Schinfeld, J. S. (1985). Puerperal inversion of a bicornuate, unicollis uterus. A case report. *The Journal of Reproductive Medicine*, 30(7), 557-558.
4. Raga, F., Bauset, C., Remohi, J., Bonilla-Musoles, F., Simón, C., & Pellicer, A. (1997). Reproductive impact of congenital Müllerian anomalies. *Human Reproduction (Oxford, England)*, 12(10), 2277-2281.