

## Uterine Inversion - A Case Report in Vrbas General Hospital

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### Abstract

Uterine inversion is partial or complete uterine prolapse. It is a rare obstetric complication which can be followed by maternal mortality in 15% of all cases. We had a female patient where, during placenta coming out of the uterus, was followed with complete uterine inversion. After diagnosing it, we tried repositioning where we succeeded partially, but since it wasn't completely repositioned, we made an emergency laparotomy.

**Keywords:** Uterine Inversion; Reposition; Laparotomy; Placenta

### Introduction

Uterine inversion is a partial or complete cervix, it is a rare complication of the obstetrician. The frequency ranges from 1 to 2,000 to 1 to several hundred thousand deliveries. Maternal survival is about 85%. The cause of death can be massive bleeding and shock state [1]. There are four degrees of uterine inversion: 1. first degree: the uterus is partially inverted; 2. the other - the fundus has passed through the cervical channel, but not through the vagina; 3<sup>rd</sup> third - the fundus is outside the vagina; Fourth - fundus, cervix and vagina have been completely proliferated and are visible. It can be acute (within 24 hours of delivery), subacute (between 24 hours and 30 days after delivery) and chronic (after 30 days of labor) and is very rare. Timely recognition is important because of rapid treatment and prevention of more serious complications (Wykes, 2009). Risks - uterine inversion factors are: a birth lasting longer than 24 hours, a short uterine, previous deliveries, the use of myorelaxants in childbirth, poorly contracted uterus, previous uterine inversion, placenta accreta, implantation of the placenta in the fundus, rough withdrawal of the umbilical cord before the placenta was removed. Symptoms of inversion are: the uterus is in front of the vagina, the fundus is not located in the abdomen where it should be, blood loss that is greater than the usual, hypotension, signs of shock. Ultrasound can also help diagnose [1].

### Aim of the Study

The aim of the paper is to point out the etiology, symptomatology, recognition, and hence the timely diagnosis of uterine inversion, as well as the therapeutic approach, both in the available literature on the subject and in the case report.

### Case Report

Patient K. S. 1988 year from Vrbas was admitted to the Maternity Hospital of the Gynecology - Obstetrics Department of the General Hospital Vrbas 03/09/2018. at 06.30 with the following obstetric finding: 1 cm long cervix, 5 cm cervical canal; fruits are full; the foremost part above the pelvic floor; the frustrations are weak, the heart's fruits are neat. The patient was a second-born, after the amenorrhea of the gestational age of 40 + 4, had an appendectomy in the history of life, in the paranormal history of the previous delivery, the vaginal vacuum was completed by extraction of the fetus. Current pregnancy of regular flow regularly controlled. At 08:40 hrs at the same

cervical and cervical length of 6 cm cavity, amniotomy, fetal water is clear, given epidural analgesia, and later 0.9% NaCl 500 ml + 5 i.j. Oxytocin. In the following examinations, two to two hours and a half hours of cramping and dilatation progression occurred and the delivery occurs at 16 hours and 11 minutes. Delivery in term, longitudinal, vaginal, impulsive pretentious, with episiotomy, in epidural analgesia. Born live, male child with TM/TD 3090/48 with AS 8/9. Fruit water is clear, a navel of neat length and morphology. The cot went out of the vagina, and during the examination it was found that the uterus was inverted in the placenta complete. In short-term OIV anesthesia, the placenta is manually separated from the uterus, after initial bleeding immediately after discharge, bleeding stays. Then there is an attempt to reposition the uterus, which is partly successful. As a manual examination and an ultrasound examination reveals that the uterus has not been completely repaired, the on-site gynecologist indicates an exploratory laparotomy according to Pfannenstiel.

Intraoperative finding is as follows: smooth-surface uterus, with no active bleeding site, inverted part of the diameter of 2 cm, with both adnexa inverted part, on the central part of the fundus. After the opening of the anterior abdominal wall, the injection of the inverted part of the uterus was made from the vagina, after which an ampoule Prostina 15M. As there was no active bleeding, the front abdominal wall was sealed by layers. After that, a manual revision of the uterine cavity is performed, examined by the soft delivery ways and the eyebrow cut from the episiotomy. Intraoperative blood loss is about 500 ml. Postpartum one ampoule of Methylergobrevine and 0.25 mg intravenous (bolus), physiological solution with 20 i.j. Oxytocin and triple antibiotic therapy.

After surgery, the patient was placed in the Intensive Care Unit. At 23o'clock and 15 minutes: the patient was hemodynamically stable, passing clear urine. By palpation of the abdomen it was found that the uterus was in good inclusion, at midnight the ampoule was administered Prostina 15 M intramuscularly. An ultrasound scan performed, showed normalcy of uterus had been obtained. On the first postoperative day, the baby was transferred to the maternity ward having stable vital parameters where antibiotic, were continued with prophylactic therapy with low molecular weight heparin, uterotonic therapy and other symptomatic therapy. Catheter was removed from the second postoperative day. Blood picture of the fourth postoperative day: Er 3.11 Hgb 91 Hct 0.278 r 219 CRP 20.5 (drop, 143.9 with PCT 0.42). Patient was discharged with a child in a good general condition on the sixth postoperative day, the end of the eighth postoperative day in the outpatient clinic, performed a control check for a month.

### Discussion

Quick recognition and diagnosis of uterine inversion is important for good prognosis. It may be that the diagnosis does not become so easy, especially if we are talking about partial inversions of the uterus. Therefore, it is advisable to check the soft birth pathways for extensive bleeding. Inverzija is often associated with bleeding that can be life threatening and shocking. An ultrasound examination can also be helpful. When the degree of inversion is determined, the following steps should be taken ensure the presence of anesthesiologists, the provision of blood derivatives, general anesthesia made available, and after the administration of intravenous fluids, it is possible to approach the removal of the placenta. Then he/she approaches the reposition - a solid duck fist, his palm or fingers around the inverted fundus. In the case of a conjunctive uterus, myorelaxants and tocolytics may be used. When the uterus repots into its original position, uterolithicus can be applied [2].

Some authors state that the placenta should not be separated until the full uterine reposition, while others consider it to be dependent on the protocol of the institution concerned. Although there is an opinion that the placenta, imbibed with blood, is too large to go back through the dilated cervix [1].

The literature describes hydrostatic O'Saliven's inversion correction technique by injecting warm saline solution into the vagina. A potential rupture of the uterus should be ruled out before the procedure. The procedure does not always require general anesthesia, but it is mandatory to place the woman in a lithotomy position. A 2h1 liter saline solution (e.g. 0.9% NaCl) can be used, which can be used with a cystoscope [3].

If the manual and hydrostatic methods do not lead to uterine reposition, then resort to surgical technique. The purpose of the surgical technique is pushing the uterus down from the bottom through the vagina and pulling the inverted part from the top, which can be

achieved by grasping the terminal for the round ligament of the uterus and gently pulling it upwards. Some authors refer to putting a deep seam on the inverted fundus and gently pulling it upwards, but it can be technically difficult to perform [2].

### Conclusion

Uterine inversion is a rare but possible obstetric complication. Recognition and rapid diagnosis is necessary for timely response and positive outcome for the mother.

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