

A TWIST IN THE TALE - RARE CASE OF UTERINE TORSION

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ABSTRACT

Dextrorotation of the gravid uterus is a normal finding in the third trimester of pregnancy. However, pathological rotation of uterus beyond 45 degrees is known as torsion of the entire uterus around its long axis at the junction between the cervix and the corpus. This is rarely seen in obstetric practice and is a ‘Once in a lifetime diagnosis’ for most obstetricians. Uterine torsion ranging from 45 degrees to 720 degrees has been reported. Detorsion of the gravid uterus is difficult to accomplish in most cases. Extraction of the baby is possible only by opening the posterior uterine wall tactfully. Uterine torsion in a mother who had undergone lower segment caesarean section (LSCS) twice in the past has never been reported in the literature. We report a case of uterine torsion in a mother who had undergone LSCS twice in the past.

Keywords: Torsion, caesarean section, acute abdomen, detorsion

1. Introduction:

Minor degrees of rotation of the uterus about its longitudinal axis are physiological, but acute torsion is an uncommon accident which does not occur in any anatomically normal uterus. Uterine torsion is defined as rotation of the uterus on its long axis of more than 45 degrees. It usually presents as acute abdomen and in many respects the symptoms resemble those of ectopic gestation if the accident occurs in early pregnancy. When it presents in late pregnancy, the differential diagnosis depends on the severity of the symptoms. However, it may be an incidental finding at caesarean section in 11% cases. Ultrasound may sometimes give some clue to the diagnosis.

2. Case History:

A 31year old gravida-3 para-2 at 38 weeks of gestation with singleton pregnancy arrived in the obstetrical unit for safe confinement. Her prior obstetrical history included two term deliveries by LSCS for cephalopelvic disproportion (CPD). There was no history of any acute pain abdomen after the previous child birth and the current pregnancy had been uncomplicated till the date of presentation. On examination, the maternal vital signs were stable. The uterus was term size and relaxed, the fetus was found to be in cephalic presentation. Vaginal examination demonstrated uneffaced cervix, with the fetal head at -1 station. She was not in labour. Non Stress Test (NST) showed a reassuring fetal heart rate pattern. The following day, mother was taken up for elective Caesarean section (CS). Under spinal anaesthesia, an incision was made over the previous Pfannenstiel scar, and the lower uterine

segment was exposed; bladder flap was not made out and the previous uterine scar was not visible. There were only minimal intraperitoneal adhesions. A transverse incision was made on the supposedly anterior aspect of lower uterine segment and the baby boy weighing 3.1 kg, was extracted. Apgar score was 7 at one minute and 9 at five minutes. The placenta was removed manually. Uterus was exteriorised and on further examination both ovaries were found to be lying anterior and subsequently a diagnosis of uterine torsion was made. Torsion was not diagnosed prior to making incision on the uterus. There was also no evidence of any vascular compromise either to the uterus or the fetus. The uterine incision was closed in two layers with delayed-absorbable suture followed by bilateral tubal sterilization by modified Pomeroy’s method. Then the contracted uterus was detorted to the normal anatomic position and put back in the pelvic cavity. Close examination of the uterus and adnexa revealed no abnormalities. Both the mother and the newborn were discharged home on the seventh postoperative day in good health.



Figure 1: Both the ovary and fallopian tube seen anteriorly



Figure 2: 180 degree uterine torsion with an incision on posterior uterine wall, being sutured.

3. Discussion:

The first ever reported case of uterine torsion was published by Labbe in 1876^(1, 2). Since then very few cases of uterine torsion have been reported, perhaps because of the non specific presentation^{1, 3, 4} and generally successfully outcome for mothers. Nevertheless, it is a potentially dangerous complication of pregnancy.

Since very few cases are reported, there were situations where the torsion is of sufficient degree to cause acute abdomen and also fetal distress. Jensen *et al* have reported a fetal mortality rate of 12%⁵ which could be even higher, considering only few cases have been reported. Cook *et al* reported a case of pathological torsion associated with placental abruption, maternal shock, and intrauterine fetal demise^{1,2}. Subsequently the patient underwent hysterectomy and oophorectomy because of development of necrosis in the uterus and ovaries. Entities reportedly associated with torsion include the following- abnormal fetal presentation, distorted uterine shape as in uterine leiomyoma, mullerian anomalies, pelvic adhesions, large ovarian neoplasms, and congenital weakness at the junction of cervix and uterine corpus, external cephalic version procedure, sudden maternal movements, abnormal pelvic architecture, hydramnios, multiple gestations, hyperactive fetus, interstitial pregnancy⁶.

The diagnosis is usually established only after opening the abdomen, or sometimes even after closure of the uterine incision⁷. Only one case of uterine torsion was diagnosed before labour: an abnormal vaginal examination led the clinicians to arrange for an Magnetic resonance imaging (MRI), which detected uterine torsion⁸.

Uterine torsion is a rare obstetric complication, nonetheless because of its associated risks, torsion should be included in the differential

diagnosis when severe but non-specific abdominal pain occurs during pregnancy. Amazingly the bladder was adherent to the lower aspect of the posterior surface of the uterus (torsion of 180 degrees), this would suggest that the torsion could have taken place in the previous pregnancy just after caesarean. In several reported cases of torsion as in our case, the degree of rotation was so severe that detorsion was not possible and the hysterotomy incision made at the time of caesarean delivery could only be performed on the posterior uterine wall^{2, 3, 4}. In the reports by Mustafa *et al*, bilateral plication of round ligaments was tried to prevent immediate post partum recurrence of torsion. They suggested this procedure may help in keeping the uterus in anteversion, reduce posterior uterine adhesion, and future dyspareunia. Since only few cases are reported amid potentially dangerous complications associated with it, factors causing uterine torsion require investigation, and the effectiveness of posterior uterine wall incision and round ligament plication needs to be analyzed. In the absence of evidence, one should recommend a caesarean for further deliveries. Probably a caesarean is safer theoretically also since it avoids the chance of uterine rupture.

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