

A Rare Case of Third Trimester Uterine Torsion



Medical Science

KEYWORDS : Uterine torsion, acute, sudden IUFD

Dr. Rashmi G Jalvee

MS OBGY, DGO, DNB, D2/301, Charkop Kesar CHS Ltd, Sector 3 Charkop, Kandivali West, Mumbai 40013

Dr. Meena Rajendra Kadrekar

MD OBGY, DGO; Shreeji Nursing Home, B-6, Sonal Apartment, Raja Shivaji Road, Virar (W), Maharashtra, 401303

ABSTRACT

Uterine torsion is an extremely rare emergency in obstetrics and gynaecology. Torsion of the uterus involves rotation of more than 45 degrees of the uterus around its long axis. It can be seen in all age groups of the reproductive period, in all parity groups, and at all stages of pregnancy. We report a case of a 25 year-old woman, Gravida 3 Abortion 2 who presented at 36 weeks gestation with severe abdominal pain and shock. Laparotomy was done, when torsion of the uterus by 180° was diagnosed. The position was corrected and cesarean section was performed. Uterine torsion is a rare complication in pregnancy and obstetricians should keep this rare complication in mind when performing a caesarean section for undiagnosed severe abdominal pain in pregnancy. Anatomical landmarks should be identified if possible, prior to uterine incision during a caesarean section, to prevent posterior hysterotomy.

INTRODUCTION:

In the third trimester of pregnancy, mild degree of dextro rotation of the gravid uterus is a common finding. However, pathological rotation of uterus in excess of 45 degrees around its long axis is known as torsion of the uterus. This is rarely seen in obstetric practice and is often a "Once in a lifetime" diagnosis for most obstetricians. Uterine torsion varying from 45 degrees to 720 degrees has been reported. Rarely, torsion may be of sufficient degree to arrest uterine circulation and result in acute abdominal catastrophe.

CASE REPORT:

Our patient, Mrs XYZ, 25 years old, gravida 3 para 0 abortion 2, at 36 weeks' gestation with a singleton pregnancy, presented with uterine cramping and decreased fetal movement since 3-4 hrs. Her obstetrical history consisted of two previous spontaneous abortions, for which dilatation and curettage was done both times. The current pregnancy had been uncomplicated until the date of presentation.

She presented with complaints of cramping pain in the abdomen since four hours of increasing severity. On examination, the patient was conscious, alert and breathless, her pulse was 130/min, blood pressure was 90/56 mm of Hg with cold clammy extremities, respiratory rate was 18/minute. Respiratory and cardiovascular systemic examination was unremarkable. On per abdominal examination, uterus was full term with longitudinal lie, cephalic presentation, uterine tenderness was present. Fetal heart rate could not be localized. On per vaginal examination, cervical os was closed. Emergency ultrasonography obstetrics was done. There was no sonographic evidence of abruption and fetal demise was confirmed. Emergency investigations were sent and blood was sent for cross matching. The patient was taken for laparotomy under general anaesthesia. On opening the abdomen, it was seen that the uterus had undergone torsion with the left adnexa deviated to the right (Figures 1&2).

Figure 1:



Figure 2:



The position was corrected. Fresh stillbirth female child of 2.4 kg was delivered. There was no evidence of abruption or uterine anomalies. Post operatively, the clinical condition of the patient stabilized and further course in the ward was uneventful. The patient was discharged on the fourth post-operative day.

DISCUSSION:

The first reported case of uterine torsion in a living woman was published by Labbé in 1876^{1,2}. Since then, uterine torsion is infrequently reported, probably because of the non-specific signs and symptoms¹. The exact etiology is not known. Piot et al.³, Jensen et al.⁴ and Wilson et al.⁵ have extensively reviewed the reports of torsion of gravid uterus. Wilson et al.⁵ found most of the cases had normal anatomy that is unexplained torsion, whereas in the review of Piot et al.³, around 32% had uterine myomata, 15% uterine anomalies especially bicornuate uterus, 8.4% had pelvic adhesions, 7% had ovarian cysts, 5% had abnormal presentation and fetal anomalies, while no discoverable causes were identified in the rest of the cases.

Nonetheless, torsion is a potentially dangerous complication of pregnancy. The common risk factors are often non-specific (cervical dystocia, painful uterine contractions, dynamic hypertonia) and therefore not always useful in diagnosing this uncommon complication of pregnancy. Co-existing conditions included uterine fibroids, adnexal masse, uterine anomalies, pelvic adhesions, fetal mal-presentations and traumatic injury. Incorporating into routine practice the palpation of round ligaments at the time of Caesarean section would most likely prevent inadvertent hysterotomy at sites other than the anterior lower segment.

The most common symptoms of uterine torsion are abdominal pain of varying intensity, birth obstruction, vaginal bleeding, shock, and urinary and intestinal symptoms. The torsion can also threaten fetal survival. Case reports have described varying fetal outcomes ranging from normal, fetal distress to sudden intra-uterine fetal deaths.

The clinical challenge of uterine torsion lies in its elusive diagnosis. The correct prognosis is rarely established except at surgical exploration. A recent report indicates that MRI has been used successfully to establish a preoperative diagnosis. To mistake torsion for a non-surgical entity or for another obstetric complication that can be managed medically may prove disastrous for the patient. Unfortunately, the signs and symptoms of acute torsion mimic those of a number of obstetric problems, such as uterine rupture, obstructed labor, or abruptio placentae, and the correct diagnosis normally is not made except at laparotomy.

Treatment of torsion depends on duration of pregnancy. When torsion is identified at surgery prior to fetal viability, untwisting of the uterus is the principal treatment. Causative pathology of the uterus or adnexa is next removed or corrected, if possible. Whether the pregnancy should be allowed to continue is unclear. Whether any procedures should be performed to fix the uterus in the usual anatomic position also is uncertain. In this unique setting, decision must be individualized. In instances when the fetus is of sufficient maturity to be considered viable, the best treatment is cesarean delivery.

Several cases of torsion have been reported in which the degree of rotation was so severe that the hysterotomy incision at time of the cesarean delivery was taken on the posterior uterine wall. Some surgeons have described these posterior incisions as inadvertent, while others have deliberately performed them. Posterior incisions are taken as the uterus cannot be rotated into the normal position until it is evacuated. Very few reports are available to allow an accurate assessment of the long-term sequelae of the posterior approach. It seems reasonable that an attempt to rotate the uterus to its normal position should precede the performance of a posterior hysterotomy. If detorsion is not possible, a transverse incision is best, curved upward, similar to the usual anterior procedure. After delivery, prophylactic plication of the round ligaments has been performed with the aim of providing uterine stability, possibly preventing recurrence of torsion in the puerperium.

The stage of pregnancy at the time of the uterine torsion has a bearing on maternal prognosis. Outcomes range from asymptomatic to shock to even maternal deaths. Establishing the correct diagnosis of uterine torsion early, before serious complications ensue, remains the challenge.

REFERENCES:

1. Jovanovic D, Del Granado A, Stiller A. Torsion of the gravid uterus: A review and a case. *J Reprod Med.* 1972; 8(2):81-84.
2. Biswas MK, Summers P, Schultis SA, Herrera EH, Pernoll ML. Torsion of the gravid uterus. A report of two cases. *J Reprod Med.* 1990; 35(2):194-7.
3. Piot D, Gluck M, and Oxorn H, "Torsion of gravid uterus," *The Canadian Medical Association Journal.* 1973; 109(10):1010-1011.
4. J.G. Jensen, "Uterine torsion in pregnancy," *Acta Obstetrica et Gynecologica Scandinavica.* 1992; 71:260-265.
5. Wilson D, Mahalingham A, Ross S, "Third trimester uterine torsion: Case report," *Journal of Obstetrics and Gynaecology Canada.* 2006; 28(6): 531-535.