Extreme Torsion of a Full Term Scarred Gravid Uterus in a Morbidly Obese Patient with Breech Presentation and Pregnancy Induced Hypertension- Case report

Dr.Ashok Anand¹, Dr.Dhruv Gohil², Dr.Mugdha Jungari³, Dr.Ritam Singh⁴

ABSTRACT
Torsion of the uterus is a condition in which it rotates on its own axis by more than 45 degrees and rarely up to 180 degrees. We are presenting a case of torsion of a full term gravid uterus in a morbidly obese patient with breech presentation and pregnancy induced hypertension (PIH) with history of cesarean section. The exact anatomy could not be identified including the position of bladder due to morbid obesity in the patient and over distension of uterus. The incision was made on relatively thinner segment taking into consideration the surrounding vital areas and then carefully extending it to an adequate level was the only way to deliver the fetus as well as placenta and membranes. Dextro-rotation of the uterus in the pregnancy is a rule. When this becomes extreme it can be dangerous for the fetus as well as the mother. Delineating the vascular supply in the patients with above condition which predisposes to the torsion may help us to suspect torsion pre-operatively.

Key Words: Extreme Torsion, Hypertension, Morbid, Obese, Scarred

¹Professor and Unit Head, ²Assistant Professor, ³Assistant Professor, ⁴Resident Doctor; Department of Obstetrics and Gynaecology, Grant Government Medical College and Sir JJ Group of Hospitals, Mumbai.

Corresponding author mail: detartsurf@gmail.com

Conflict of interest: None

INTRODUCTION
Torsion of the uterus is a condition in which it rotates on its own axis by more than 45 degrees and rarely up to 180 degrees¹. 75% such cases are due to dextro-rotation. The exact mechanism by which it occurs is not known but it is found to be associated with uterine fibroids, uterine anomalies, pelvic...
masses, pendulous abdomen, spinal deformities, mal presentations, mal positions, etc. We are presenting a case of torsion of a full term gravid uterus in a morbidly obese patient with breech presentation and pregnancy induced hypertension (PIH) with history of cesarean section.

**CASE REPORT**

A 37 year old morbidly obese patient, Gravida2Para1Living1 with 39 weeks gestation was refer to our hospital due to morbid obesity, previous cesarean and PIH. Her weight was 116 kgs. Previous cesarean section was done 5 years back for non progress of labor. She was initially registered at a private hospital where she was stated on tablet alphamethyldopa and nifedipine for pregnancy induced hypertension. Thereafter her blood pressure was under control on medication. On examination her blood pressure was 150/90 mmHg. She had edema over her feet and abdominal wall. Her abdomen was pendulous and over distended. The uterus was found to be full term and relaxed with longitudinal lie and breech presentation. All routine investigations including blood sugar levels were normal. Obstetric ultrasonographic examination showed gestational age to be 40 weeks with a placenta being posterior, breech presentation and adequate liquor. Uterine scar thickness was 3 mm and cervical internal os was closed. She went into spontaneous labor and was taken up for emergency cesarean section indication being previous cesarean with breech presentation in labour.

During surgery after opening the abdomen through a Pfannensteil incision, the ovary on the right side was found to be anteriorly placed. The round ligament was overstretched but could not be traced fully. The exact anatomy could not be identified including the position of bladder due to morbid obesity in the patient and over distension of uterus. Also uterus could not be moved on either side even after trying. Hence the nick was made on the uterus anteriorly. The two cut edges were held with Allis’ forceps and the incision was extended further. Once the incision was extended
sufficiently, membranes were ruptured and the baby was delivered by breech presentation. Placenta and membranes were removed completely. Utero-tonics were given. The uterus was well contracted and the uterine incision was closed with No.1 Vicryl in two layers. Now there was sufficient space in the abdomen to correct the uterine torsion and to our surprise we found that the ovary on the right side below the incision was in fact the left ovary, the round ligament was over-stretched on the right side and the incision was in the lower segment but posteriorly. The bladder peritoneum was absolutely intact. After checking the haemostasis and cleaning the paracolic gutters, abdomen was closed in layers. The baby’s birth weight was 3.7 kg, cried immediately after birth, had no congenital malformations and was kept with mother. Post operative course in ward was uneventful. Both mother and child were discharged in healthy condition.

**DISCUSSION**

Dextro-rotation of gravid uterus is a normal finding especially in the third trimester. However the rotation of uterus beyond 45 degrees is pathological and is rarely seen in obstetric practice. It is an unusual complication of pregnancy and for most obstetricians, it probably represents a ‘once in a lifetime' diagnosis. Non specific presentation and a successful pregnancy outcome could be the reasons for rare reporting of this condition. The fetal mortality can range from spontaneous abortions to still births. Perinatal mortality is variably reported from 12% to 18%\(^3\). 2 cases were reported antenatally on MRI which were ordered due to an abnormal vaginal examination findings.

In a patient with a previous caesarean section the alteration in the utero cervical anatomy after healing could be one of the predisposing factors for uterine torsion. The co-existing conditions like uterine fibroids, uterine anomalies, pelvic masses, pendulous abdomen, previous pelvic
operations, spinal deformities, malpresentations and malpositions, etc could be responsible for the torsion. However presence of these conditions does not always herald this complication. There are no evidence based recommendations regarding future pregnancies.

In this case the patient was morbidly obese with a pendulous abdomen with breech presentation with history of a previous pelvic surgery (cesarean section). These may have predisposed her uterus to undergo torsion. Due to a transverse abdominal incision and over distended scarred uterus there was hardly any space to manoeuvre the uterus. Also it was very difficult to know the exact anatomy and therefore the incision was made on relatively thinner segment taking into consideration the surrounding vital areas and then carefully extending it to an adequate level was the only way to deliver the fetus as well as placenta and membranes.

**CONCLUSION**

Dextro-rotation of the uterus in the pregnancy is a rule. When this becomes extreme it can be dangerous for the fetus as well as the mother. Fetal distress and demise are reported due to compromise to fetal blood supply. Torsion causing a gangrenous uterus requiring an emergency obstetric hysterectomy is known. What was surprising is that in our case this patient had no symptoms whatsoever. The liquor was adequate and baby weight was 3.7 kg showing no compromise in the blood supply to the fetus although the torsion was extreme that is 180 degrees.

However this may not happen every time when there is a torsion and some amount of fetal compromise is expected. Delineating the vascular supply in the patients with above condition which predisposes to the torsion may help us to suspect torsion pre-operatively. Whether a normal vaginal delivery is possible or not and what happens to the myometrial contractility in labor needs to be studied.
Extreme Torsion of a Full Term Scarred Gravid Uterus in a Morbidly Obese Patient with Breech Presentation and Pregnancy Induced Hypertension

Dr. Ashok Anand et al.

REFERENCES


Casereport

Extreme Torsion of a Full Term Scarred Gravid Uterus in a Morbidly Obese Patient with Breech Presentation and Pregnancy Induced Hypertension

Dr. Ashok Anand et al.