CASE REPORT

Dextro Rotation of Uterus at Term: Classical Caesarean Section Through Posterior Uterine Wall

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ABSTRACT

Uterine torsion is rare obstetrical complication up till 1992. Only 212 cases have been reported in literature. Here we present a case of 26 years old lady with history of previous II LSCS. She was 38 weeks pregnant with abruptio placenta + IUD baby. On opening the abdomen, she had Dextro rotation of uterus through an angle of 180°. Baby was delivered through classical posterior uterine wall incision. Dextro rotation was corrected. Bilateral tubal ligation was done.

KEY WORDS: Uterine Torsion, Dextrorotation, Classical Caesarean Section.

INTRODUCTION

Uterine torsion is defined as a rotation of more than 45 degree around the long axis of uterus ². It is an unusual complication of pregnancy and for most obstetricians it is "Once in a life time diagnosis".

Uterine torsion ranges from 45 degrees to 180 degrees but some cases of torsion up to 720 degrees have also been reported in literature ³. Physiologic Dextro rotation occurs common in pregnancy while pathologic trans-rotation is rare obstetric complication. Uptil 1992 about 212 cases have been reported in literature ⁴. Dextro rotation occurs in two third of cases and levo rotation occur in another one third ⁵.

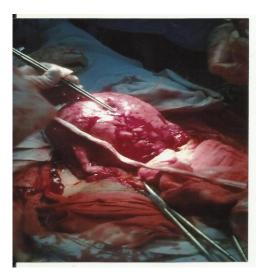
Clinical presentation is non-specific ranging from mild abdominal discomfort to symptoms of acute abdomen or shock. It is asymptomatic in 11% of cases (3A, 46E). Although exact mechanism of uterine torsion is unknown, in 66% of cases intrinsic pelvic pathology is found (5A). Uterine torsion is associated with uterine myomas. Uterine developmental anomalies, fetal malpresentations, ovarian tumours, and intra abdominal adhesions (IA). Recent studies have shown association of torsion with history of previous C-section (6A). Torsion resulting from abdominal trauma has also been reported (7A). The preoperative diagnosis of uterine torsion is difficult both ultrasonographically and magnetic resonance imaging can be used in patients with high index of suspicion. Nicholson et al (8A) suggested the use of pelvic magnetic resonance imaging to diagnose uterine torsion which will show an X-shaped configuration of upper vagina. Other authors have used ultrasound scan to establish diagnosis which might show a change in placental localization or a change in position of fibroid (IA). Recently both MRI + CT scanning have been used to make diagnosis prior to exploratory surgery (32,33,34), However the definite diagnosis is at laparotomy.



CASE REPORT

A 26 years old woman gravida III, para II was admitted in emergency department of Sir Ganga Ram Hospital. She was 38 weeks pregnant, presented with mild labour pains for 2 hours. She had her antenatal checkups at some private clinic. Her antenatal course was uneventful. She gave history of previous two caesarean sections at some private hospital. First caesarean section was done due to fetal distress. Second was done

due to failure to progress. She did not give history of hypertension or diabetes mellitus.



On general physical examination her pulse was 90/min, BP 120mmHg, pallor was positive.

On Abdominal Examination, Abdomen was tense, slightly tender, fundal height was 36 weeks, lie was transverse, head was in right hypochondrium. Fetal heart sounds were not audible. Liquor seems to be on excessive side. Mild palpable contractions were present and scar tenderness was negative.

On Vaginal Examination the External cervical OS was closed and cervix was soft. All baseline investigations done. Blood group hemoglobin estimation was 8 gm/dl. Urine complete examination was normal. Ultrasound scan showed single dead fetus with transverse lie. Fetal cardiac activity was absent. Placenta was fundoanterior, an echogenic mass 8x7cm present close to placental edge anteriorly. Liquor was excessive, AFI was 38. BPD was 8.8 cm corresponding to 35 weeks gestation. Excessive fetal scalp and abdominal wall oedema was present. Fetal pleural effusion/ascites was noted.

She was shifted for caesarean section on opening the abdomen, uterus was Dextrorotated through an angle of 180 degree, one tube and ovary was stretched and visualized vertical incision was given and baby boy of 2.5 kg was delivered. It was fresh IUD. About 200cc retroplacental clots were removed. Liquor was excessive. After stitching the uterus it was rotated through an angle of 180 degree. Bilateral tubal ligation was done. Her post operative course was uneventful. Post operative

hemoglobin was 10gm.dl. She was discharged on 3rd post operative day. She came on 8th day for removal of stitches and she was fine.

DISCUSSION

Uterine torsion is an uncommon but potential life threatening condition. It is association with human (14,15,16,7,8,19,20,21,22,23,24,25,26,27,28,29). medicine.

As the clinical presentation of condition is non-specific so the preoperative diagnosis is difficult. The earlier reported cases at 6 weeks and the latest is at 43rd week. The exact mechanism of uterine torsion is not known but most studies showed its association with fetal malpresentations and previous sections (1A) as was the case of our patient. In approximately 20% of cases no causative factor is found.³⁰

Torsion presented in labour may manifest itself by fetal distress or failure of cervix to dilate despite strong uterine contractions due to reduction in uterine blood flow. Other clinical signs like vaginal bleeding, uterine tenderness, twisted vaginal canal and urethral displacements may also be seen. Our patient has absent fetal heart and suspicion of abruption on ultrasound scan.

In cases of torsion recognized at term, manual correction followed by delivery of fetus by caesarean section is a treatment of choice (IA). In our case as uterus was also stretched due to excessive liquor, manual correction of uterus before delivery of baby was not possible. The Baby was delivered through posterior wall.

In literature both vertical and transverse posterior uterine incisions have been described. Theoretically the risk of rupture of posterior transverse incision is less than posterior vertical incision although exact risk is not known (1A). In our patient vertical posterior wall incision was given as large dilated blood vessels were present and secondly patient had given consent for tubal ligation. Some authors have recommended bilateral placation of round ligaments to prevent immediate post partum recurrence of uterine torsion (9A). This helps in keeping the uterus in anteverted position, reduce posterior wall adhesions and future dysperunia. Mustafa et al described bilateral placation. If this patient had not given consent for tubal ligation then she should have a repeat caesarean section in future

pregnancy irrespective of previous obstetrical history.

If on opening the abdomen uterine necrosis or thrombosis of blood vessels, resulting from prolonged torsion is seen then total abdominal hysterectomy should have been considered.

Uterine torsion is associated with significant mortality and morbidity. Overall mortality is around 13% (11A) and is directly proportional to the duration of gestation and degree of torsion (11A). However, since 1960 only one maternal death due to uterine torsion has been reported 912A). The perinatal mortality has been reported to be around 12% (3A).

As in our patient the baby was dead but it was non-immune hydrops with excessive liquor, which may be the cause of death besides placental abruption and uterine torsion autopsy could have been helpful in this regards. Placental abruption is associated with episodes of acute torsion regardless of exact pathophysiology (C)³¹. An elective uterine fixation procedure is selective delivered. Some after baby is authors recommend complete fixation operation to recurrence if delivery prevent accomplished at the time of original exploration. Both the etiology of this peculiar and rare disorder is speculative and risk of retroversion in the same or speculative pregnancy remains unknown.

REFERENCES

- The internet Journal of Obstetrician AND Gynecology 6 ISSN-1528-8439
- Kremer JAM, van Dongen P WJ. Torsion of the pregnant uterus with a change in placental localization on ultrasound; a case report. Eur J Obstet Gynecol Reprod Biol 1989; 31: 273-275.(s)
- 3. Corr JE. Axial torsion of the gravid uterus in two successive pregnancies. Am J Obstet Gynecol. 1943; 46: 749-751 (s).
- Jenson JG. Uterine torsion in pregnancy. Acta Obstet Gynecol Scand 1992; 71: 260-265.(s)
- Barber HRK, Graber EA. Uterine Torsion during pregnancy. In: Surgical disease in pregnancy. Philadelphia: WB Saunders Co Ltd, 1974: 387-388.(s)
- Robinson AL< Duvall HM. Torsion of the pregnant uterus. J Obstet Gynaec Br Commonow. 1931; 38:55-84.(s)

- Kawakami S, Togashi K, Sagoh T, Kimura I, Noguchi M, Takakura K, Mori T, Konishi J. Uterine deformity caused by surgery during pregnancy. J Comput Assist Tomogr. 1984; 18:272-74(s).
- 8. Duplantier N, Begneaud W, Wood R, Dabezies C. Torsion of gravid uterus associated with maternal trauma. A case report. J Report Med. 2002; 47:683-685.(s)
- Nicholson WK, Coulson CC, McCoy CM. Semelka RC. Pelvic magnetic resonance imaging in the evaluation of uterine torsion. Obstet & Gynaecol. 1995; 85:888-90.(s)
- Pelosi MA 3rd, Pelosi MA. Managing extreme uterine torsion at term: A case report. J Report Med. 1998; 43:153-57.(s)
- 11. Mustafa MS, Shakeel F, Sporrong B. Extreme torsion of the pregnant uterus. Aust NZ J Obstet Gynaecol. 1999;39:360-63.(s)
- 12. Nesbitt REL, Corner GW. Torsion of the human pregnant uterus. Obstet Gynecol Surv. 1956; 11:311-32.(s)
- 13. Guie P et al. Uterine torsion with maternal death. Our experience and literature review. Cli Exp Obst & Gyn. 2005; 32: 245-46.(s)(modified on February 2009)
- 14. Jensen JG. Uterine torsion in pregnancy. Acta Obstet Gynecol Scand. May 1992;71(4):260-5. [Medline].
- Guié P, Adjobi R, N'guessan E, Anongba S, Kouakou F, Boua N. Uterine torsion with maternal death: our experience and literature review. Clin Exp Obstet Gynecol. 2005;32(4):245-6. [Medline].
- Demaria F, Goffinet F, Jouannic JM, Cabrol D. Preterm torsion of a gravid uterus didelphys horn of a twin pregnancy. Obstet Gynecol. Nov 2005;106(5 Pt 2):1186-7. [Medline].
- 17. Jeong YY, Kang HK, Park JG, Choi HS. CT features of uterine torsion. Eur Radiol. Dec 2003;13 Suppl 4:L249-50. [Medline].
- Rich DA, Stokes IM. Uterine torsion due to a fibroid, emergency myomectomy and transverse upper segment caesarean section. BJOG. Jan 2002;109(1):105-6. [Medline].
- 19. Kim SK, Chung JE, Bai SW, Kim JY, Kwon HK, Park KH. Torsion of the pregnant uterus. Yonsei Med J. Apr 2001;42(2):267-9. [Medline].

- 20. El-Taher SS, Hussein IY. Unexpected torsion of the gravid uterus [case report]. J Obstet Gynaecol. Feb 2004;24(2):177. [Medline].
- 21. Kovavisarach E, Vanitchanon P. Uterine torsion with shock. Aust N Z J Obstet Gynaecol. Aug 1999;39(3):364-5. [Medline].
- 22. Momin AA, Saifi SG, Pethani NR, Mitha SH. Sonography of postpartum uterine inversion from acute to chronic stage. J Clin Ultrasound. Jan 2009;37(1):53-6. [Medline].
- 23. Duplantier N, Begneaud W, Wood R, Dabezies C. Torsion of a gravid uterus associated with maternal trauma. A case report. J Reprod Med. Aug 2002;47(8):683-5. [Medline].
- 24. Cook KE, Jenkins SM. Pathologic uterine torsion associated with placental abruption, maternal shock, and intrauterine fetal demise. Am J Obstet Gynecol. Jun 2005;192(6):2082-3. [Medline].
- 25. Munro KI, Horne AW, Martin CW, Calder AA. Uterine torsion with placental abruption. J Obstet Gynaecol. Feb 2006;26(2):167-9. [Medline].
- 26. Mustafa MS, Shakeel F, Sporrong B. Extreme torsion of the pregnant uterus. Aust N Z J Obstet Gynaecol. Aug 1999;39(3):360-3. [Medline].
- 27. Pelosi MA 3rd, Pelosi MA. Managing extreme uterine torsion at term. A case report. J 1998;43(2):153-7. Reprod Med. Feb [Medline].

- 28. Picone O, Fubini A, Doumerc S, Frydman R. Cesarean delivery by posterior hysterotomy due to torsion of the pregnant uterus. Obstet Gynecol. Feb 2006;107(2 Pt 2):533-5. [Medline].
- 29. Salani R, Theiler RN, Lindsay M. Uterine torsion and fetal bradycardia associated with external cephalic version. Obstet Gynecol. Sep 2006;108(3 Pt 2):820-2. [Medline].
- 30. CMA Journal /September 3,1977/VOL. 117 501.
- 31. Irish Journal of medical science. VOLUME 161.NUMBER 46-47 2. DOL:10.1007/BF02942081 Classical caesarean section through the posterior uterine wall. February 1992.
- 32. Luk SY, Leung JL, Cheung ML, So S, Fung SH, Cheng SC. Torsion of a nongravid myomatous uterus: radiological features and literature review. Hong Kong Med J. Aug 2010;16(4):304-6. [Medline].
- 33. Momin AA, Saifi SG, Pethani NR, Mitha SH. Sonography of postpartum uterine inversion from acute to chronic stage. J Clin Ultrasound. Jan 2009;37(1):53-6. [Medline].
- 34. Nicholson WK, Coulson CC, McCoy MC, Semelka RC. Pelvic magnetic resonance imaging in the evaluation of uterine torsion. Obstet Gynecol. May 1995;85(5 Pt 2):888-90. [Medline].