CASE REPORT

TORSION OF GRAVID UTERUS

Potharaju Jayanthi¹, P. V. Raghava Rao²

HOW TO CITE THIS ARTICLE:

Potharaju Jayanthi, P. V. Raghava Rao. "Torsion of Gravid uterus". Journal of Evolution of Medical and Dental Sciences 2015; Vol. 4, Issue 07, January 22; Page: 1274-1277, DOI: 10.14260/jemds/2015/177

ABSTRACT: Torsion of gravid uterus is a rare complication in pregnancy. It is often associated with a previous cesarean section. When a patient with a previous history of cesarean section complains of pain abdomen, apart from scar dehiscence and abruptio placenta, torsion of gravid uterus should be entertained as a differential diagnosis. The case report highlights the presentation of rare case of torsion of gravid uterus.

KEYWORDS: Torsion, gravid uterus.

INTRODUCTION: Torsion of gravid uterus is a rare condition. It is an important differential diagnosis for acute abdominal pain especially with uterine abnormalities.⁽¹⁾ Very rarely torsion is associated with uterine rupture and death of the baby. Perinatal mortality of 17% and maternal mortality of 13% are reported with torsion of gravid uterus. Till today 240 cases of torsion of gravid uterus have been reported.⁽²⁾ We present a rare case of torsion of full term gravid uterus with fetal distress in government general hospital, Guntur, Andhra Pradesh.

CASE REPORT: A 28 year old G₄P₁L₁A₂ was admitted in Government General Hospital, Guntur, Andhra Pradesh on 06/2/12 at about 2.30 am to the labour rooms with a complaint of pain abdomen since 11.00 pm i.e. since 3 and ½ hrs, with no H/o. bleeding or draining PV. Her expected date of delivery was on 03-03-12. Previously she had a full term LSCS at Tenali Govt. Hospital 4 years back.

At the time of admission her general condition was satisfactory. P/A- uterus was 34 weeks with a live intra uterine pregnancy with transverse lie and the uterus was relaxed. A provisional diagnosis of threatened preterm labor was made and managed with nitroglycerine patch. Patient was shifted after doing all the investigations which were found to be within normal limits.

After one week i.e. on 14-02-12 at about 2.10 am patient was brought to labor room by the mother with severe abdominal pain and vomitings since ½ hour. On examination patient was grossly anemic, profusely sweating, with cold clammy extremities with a dry tongue. Her pulse rate was 130/min, and BP was 60/22.

On per-abdominal examination pfannenstiell scar was present. Severe abdominal tenderness was present. Patient did not allow the palpation of fetal parts. Fetal heart was not heard. On pervaginal examination cervix was drawn up, uneffaced, OS was closed, presenting part was not within reach.

Bed side ultrasound was done. Uterus was intact and fetal heart rate was 40/min. In view of previous cesarean section a provisional diagnosis of threatened scar rupture was made. Emergency laparotomy was planned with 3 units of blood reserved for transfusion.

Abdomen was opened with sub umbilical midline incision. Immediately after opening the abdomen round ligaments could not be identified. Uterus was highly vascular. An attempt was made to identify the round ligaments. After partial correction of the torsion round ligaments were identified.

CASE REPORT

A high transverse incision was given in the lower segment. About 1000ml of dark blood was present in the uterine cavity. Baby presented as traverse lie and delivered as breech. A female child of 2.8 kg with apgar 2 was delivered and kept on pediatric ventilator. Placenta was posterior and fundal and delivered manually.

After delivery torsion of uterus, fallopian tubes, round ligament by about 1 ½ turns was identified. Untwisting of torsion was done. After correction of torsion vascularity of uterus and tubes was found to be normal. There was no post-partum hemorrhage.

Round ligament plication was done bilaterally. 3 units of blood transfusion was given intra-operatively. Patient was shifted to ICU for observation. Patient's post-operative period was uneventful and patient was discharged on 10th post-operative day.

Definition of torsion Uterus: More than 45 degrees rotation of uterus on it's own axis is defined as torsion of uterus. In 80% of cases there will be dextrorotation and in the rest there will be levorotation.⁽¹⁾

Predisposing factors for torsion gravid uterus are: Myomas- 31.5%; Uterine anomalies – 14.9% bicornuate uterus; Pelvic adhesions – 8.2%; Ovarian cyst – 7%; fetal anomalies and malpresentations- 4.1%; Abnormalities of spine and pelvis – 2.7%; Unknown-3.5%.^(1,2,3,4)

DISCUSSION: Torsion of gravid uterus is extremely rare complication. Common feature in all cases of torsion gravid uteri recently reported is previous LSCS. This is thought to be because of poor isthmus healing, suboptimal restoration of normal cervical length with elongation of cervix leading to structural weakness and angulation at isthmic region.⁽⁵⁾

In the present case the patient presented with shock and fetal bradycardia. This patient also had a previous cesarean section. Till today only 240 cases are reported with perinatal mortality of 17% and maternal mortality of 13%.⁽²⁾

Torsion can occurs at all ages, in any trimester, during any stage of labour and irrespective of parity. In torsion patient usually presents with abdominal pain, shock, vomitings, bleeding per vagina. obstructed labour, urinary tract and intestinal symptoms.

During labour it presents as failure of dilatation despite good uterine contractions, uterine tenderness, twisted vaginal canal, urethral displacement.⁽⁶⁾

On USG examination, placental site alteration and, change in the position of fibroids if previously identified. DOPPLER shows abnormal position of ovarian vessels across the uterus.⁽⁷⁾ MRI shows X shaped upper vagina in torsion uterus.⁽⁸⁾

Round ligament plication prevents immediate post-partum recurrence, keeps the uterus in position, decreases post-operative uterine adhesions, decreases future dyspareunia. Uterosacral ligament plication prevents long term recurrence.^(9,10)

REFERENCES:

1. D. Piot, M. Gluck, and H. Oxorn, "Torsion of gravid uterus," The Canadian Medical Association Journal, vol. 109, no. 10, pp. 1010–1011, 1973.
2. J. G. Jensen, "Uterine torsion in pregnancy," Acta Obstetrica et Gynecologica Scandinavica, vol. 71, pp. 260–265, 1992.

CASE REPORT

3. D. Wilson, A. Mahalingham, and S. Ross, "Third trimester uterine torsion: case report," *Journal of Obstetrics and Gynaecology Canada*, vol. 28, no. 6, pp. 531–535, 2006.
4. N. Duplantier, W. Begneaud, R. Wood, and C. Dabezies, "Torsion of a gravid uterus associated with maternal trauma: a case report," *Journal of Reproductive Medicine for the Obstetrician and Gynecologist*, vol. 47, no. 8, pp. 683–685, 2002.
5. Kawakami S. Togashi K. Sagoht. Kimural. Noguchi M. Takakura K. Mori T. Konishi J. Uterine deformity caused by surgery during pregnancy, *J comput Assist Tomogr* 1994; 18: 272-274.
6. A Dua. K Fishwick, B. Devarshetty, Uterine torsion in Pregnancy, A review. *The Internet Journal of Gynaecology and Obstetrics* 2005, Volume 6, no.1.
7. P. Gule, R. Adjobi, E. Nguessan et al., "Uterine torsion with maternal death: our experience and literature review," *Clinical and Experimental Obstetrics and Gynecology*, vol. 32, no. 4, pp. 245–246, 2005.
8. W. K. Nicholson, C. C. Coulson, M. C. McCoy, and R. C. Semelka, "Pelvic magnetic resonance imaging in the evaluation of uterine torsion," *Obstetrics and Gynecology*, vol. 85, no. 5, part 2, pp. 888–890, 1995.
9. M. A. Pelosi III and M. A. Pelosi, "Managing extreme uterine torsion at term: a case report," *Journal of Reproductive Medicine for the Obstetrician and Gynecologist*, vol. 43, no. 2, pp. 153–157, 1998.
10. M. S. Mustafa, F. Shakeel, and B. Sporrang, "Extreme torsion of the pregnant uterus," *Australian and New Zealand Journal of Obstetrics and Gynaecology*, vol. 39, no. 3, pp. 360–363, 1999.

Fig. 1: Congestion of uterus due to torsion

Fig. 2: Uterine incision to deliver the baby

CASE REPORT

Fig. 3: Twisting of round ligaments due to torsion

AUTHORS:

1. Potharaju Jayanthi
2. P. V. Raghava Rao

PARTICULARS OF CONTRIBUTORS:

1. Assistant Professor, Department of Obstetrics and Gynaecology, Guntur Medical College, Guntur.
2. Associate Professor, Department of Obstetrics and Gynaecology, Guntur Medical College, Guntur.

NAME ADDRESS EMAIL ID OF THE CORRESPONDING AUTHOR:

Dr. P. V. Raghava Rao,
Plot No. 100,
2nd Lane,
N. G. O Colony,
Venugopal Nagar,
Guntur, Andhra Pradesh, India.
E-mail: pvr Rao59@gmail.com

Date of Submission: 09/01/2015.
Date of Peer Review: 10/01/2015.
Date of Acceptance: 14/01/2015.
Date of Publishing: 22/01/2015.