



## Asymptomatic levotorsion of a gravid uterus

*Dalal Sachin J, Pandit Suchitra N, Rao Sanjay B*

Department of Obstetrics and Gynaecology, Lokmanya Tilak Municipal Medical College and Hospital, Mumbai - 400 022.

**Key words :** asymptomatic torsion, gravid uterus.

### Introduction

Torsion of a gravid uterus is very rare. A Medline search revealed only 46 cases reported since 1985 and none with a rotation of 270° or more.

### Case report

A 26 year old gravida 2, para 1, living 1, was admitted at 34.5 weeks of gestation for treatment of mild pregnancy induced hypertension (PIH). She did not have history of PIH in the previous pregnancy.

Her pulse was 88 beats/minute and blood pressure 150/100 mmHg. On abdominal examination, the fundal height was corresponding to 34-36 weeks gestation. There was a single fetus in longitudinal lie and cephalic presentation. Fetal heart rate (FHR) was 144/minute and regular. The uterus was relaxed. On vaginal examination, the cervix was posterior and internal os was closed. There was no demonstrable show or a leak.

### Investigations

All her blood investigations were within normal limits. Urine examination revealed 1+ albuminuria. Ultrasound examination showed a single live fetus appropriate for the gestational age. The amniotic fluid index (AFI) was 14 cm and placental maturity grade II.

---

*Paper received on 06/09/2004 ; accepted on 10/06/2005*

Correspondence :

Dr. Dalal Sachin J

9, Shree Krishna Ashish

137, Garodia Nagar

Ghatkopar (East), Mumbai - 400 077.

Tel. 98210 40020.

Email : sachirag@radiffmail.com

After admission, she was started on tablet alpha methyl dopa (500 mg) four times a day. With this her blood pressure was stabilized at 130/80 mmHg.

After 5 days of admission, she complained of vaginal leaking. On vaginal examination, the cervix was 1 cm dilated and poorly effaced. Bag of membranes was absent and liquor amnii was clear. A cardiotocograph (CTG) showed a persistent fetal tachycardia of 176 beats per minute. Uterine activity of 1 contraction lasting for 10 seconds every 10 minutes was noted. In view of fetal tachycardia and poor Bishop score it was decided to deliver the baby by a cesarean section.

On opening the abdomen by a Pfannensteil incision, the uterus was found to be levorotated by 180° in the anticlockwise direction. The right fallopian tube and round ligament were stretched across the uterus to the left side. Both the ovaries were normal. The uterus was corrected back to a normal position. The loose uterovesical fold of peritoneum was incised and the urinary bladder pushed down by finger dissection. The lower uterine segment was well formed. A transverse incision was made on the lower uterine segment and a 2.5 kg male baby was delivered by vertex. The baby had 1 and 5 minute apgar scores of 9 and 10 respectively. The uterus and abdominal wall were sutured in layers. The patient recovered well and was discharged on the 7th postoperative day.

### Discussion

In the present case, it was surprising that despite the torsion of the uterus along an angle of 180° the patient remained asymptomatic. The onset of the torsion occurred insidiously during the course of pregnancy. We were fortunate to have a safe outcome.

A review of literature shows that the clockwise rotation to the right is common in pregnancy. Torsion through a sufficient degree which can arrest uterine circulation and produce an

acute abdominal crisis is however rare. According to Jensen<sup>1</sup>, the most usual symptoms of uterine torsion are birth obstruction, abdominal pain, vaginal bleeding, shock, and urinary and intestinal disturbances. Only 11% are asymptomatic. Bakos and Axelsson<sup>2</sup> reported a case of severe levotorsion associated with fetal heart rate deceleration. The patient underwent a cesarean section. Due to extreme torsion, incision was made inadvertently on the posterior wall of the uterus. Extreme uterine torsion can be confused with an abdominal pregnancy. Dietz et al<sup>3</sup> and Nicholson et al<sup>4</sup> have suggested the accuracy of diagnosing this condition antepartum by an 'X - sign' on the magnetic resonance imaging (MRI). Vagina is normally seen on the MRI as an 'H - shaped' structure. But with torsion of the uterus and upper vagina, it appears as an 'X-shaped' structure.

During cesarean section one must routinely rule out uterine

rotation before making uterine incision by locating the attachments of the round ligaments to the uterus. Missing significant rotation can lead to uterine incision extending laterally causing bleeding from uterine vessels and possible ureteric injury while 180° rotation can result in the uterine incision being made on the posterior wall.

#### References

1. Jensen JG. Uterine torsion in pregnancy. Acta Obstet Gynaecol Scand 1992;71:26-5.
2. Bakos O, Axelsson O. Pathologic torsion of the pregnant uterus. Acta Obstet Gynaecol Scand 1987;66:85-86.
3. Dietz HP, Teare AJ, Wilson PD. Sacculation and retroversion of the gravid uterus in the third trimester. Aust NZ J Obstet Gynaecol 1998;38:343-5.
4. Nicholow WK, Coulon CC, McCoy MC et al. Pelvic magnetic resonance imaging in the evaluation of uterine torsion. Obstet Gynecol 1995;85:888-90.