Asymptomatic Uterine Torsion in a Pregnant Woman

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Abstract Some degree rotation of the gravid uterus in the third trimester of pregnancy is not an abnormal finding. However, extreme uterine torsion of 180° around its cervical junction is a relatively rare event in obstetrical practice. We report here such a case that detected at laparotomy for an emergency cesarean section due to rupture of amniotic membrane.

Keywords Uterine torsion · Pregnancy · Caesarean · Uterus

Case Report

A 42-year-old woman gravida 3 para 2 was admitted to the obstetrical unit at 39-weeks gestation due to a singleton pregnancy, with rupture of membrane from 1 h before admission. She had a history of gestational diabetes mellitus and mild hypertension. Her prior obstetrical history included two uncomplicated term vaginal deliveries and 19-year amenorrhea. Current pregnancy had been uncomplicated until the date of presentation. The patient was not in labor, and fetal presentation was breech, so an emergency cesarean section was carried out.

At surgery, the diagnosis of uterine torsion was not made. As shown in the Fig. 1, following delivery of the fetus and placenta, it was noted that the uterus had dextrorotated 180°, and posterior hysterotomy was performed. Intraoperative

inspection revealed the uterus to be twisted 180°. The uterine incision was performed on the posterior aspect of the lower uterine segment. No uterine anomalies or fibroids were seen.

Prophylactic bilateral shortening of the round ligaments (plication) was performed at delivery to prevent recurrent torsion in the immediate puerperium. She was discharged in excellent condition 48 h later.

Comment

Uterine torsion occurs in all trimesters of pregnancy and in the nonpregnant state. No known association exists between torsion and maternal age or parity. The cause is not clearly defined, but many predisposing factors are described. Uterine asymmetry, from fibroids or müllerian anomalies, is identified in most cases, but other factors include fetal malpresentation, pelvic adhesions, and abdominal or ligamentous laxity. Only 16 % of cases occur without discernible cause [1]. None of these causes were present in our case, so this case is among this 16 %, and no obvious cause could be identified.

Uterine torsion is most often 180°, but 9 % of cases are more severe [2]. The uterus is dextrorotated in two-thirds of the cases, likely because of its physiologic rightward shift during pregnancy. The degree of the torsion in our case was 180°, and the side was dextrose also. Symptoms of uterine torsion vary depending on the degree and duration of torsion. Obstructed labor, intestinal or urinary complaints, abdominal pain, uterine hypertonus, vaginal bleeding, and maternal shock have been reported [2]. In our case, the patient did not complain any of these sign or symptoms, and we noted no anatomic abnormalities of the maternal pelvis in this case. Variable symptomatology and lack of a specific diagnostic sign make uterine torsion extremely difficult to recognize before laparotomy. Typical preoperative diagnoses include abruptio, uterine rupture, fetal malpresentation, abdominal

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Fig. 1 The uterine torsion of 180° was noted at the end of the third trimester of pregnancy. In this case, posterior hysterotomy was performed for delivery of the fetus and placenta

pregnancy, appendicitis, or pelvic mass torsion [1]. We did not diagnose the rotation before operation, and we notice that the uterus is rotated only after delivery of fetus.

Maternal prognosis with uterine torsion depends on the stage of pregnancy and degree of rotation. Mortality rates are highest in the fifth to sixth months of pregnancy (17 %) and decrease as gestational age advances. Torsion of 180 to 360° historically carries a 36 % mortality rate; although only one death has been reported since 1960. Fetal outcome is similarly dependent on the degree of torsion and gestational age. Fetal demise has occurred in 71 % of cases with torsion of 180 to 360° [1]. Both the mother and the neonate were in good condition after the operation, and both were discharged from hospital 48 h later.

Associated adnexal torsion requiring bilateral salpingo-oophorectomy has only been reported in 7 % of cases [1–3]. After delivery, we tight the ligamentous of the region, and salpingo-oophorectomy were not done.

Predelivery radiologic diagnosis of chronic uterine torsion has been described using both magnetic resonance imaging

and ultrasound modalities [4–6]. However, we did not use the radiologic methods for diagnoses.

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