

Unanticipated Uterine Torsion in Pregnancy

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Dear Editor,

Uterine torsion is a rare gynaecological emergency defined as rotation of the uterus around its longitudinal axis, of greater than 45°. Obstetric-associated perinatal and maternal complications include placental abruption, intrauterine fetal death, and maternal death. Abdominal pain is the most common presenting complaint amidst a host of typically non-specific symptomology¹. We present the case of asymptomatic uterine torsion, diagnosed intraoperatively, followed by an uneventful postoperative course for patient and newborn.

A 40-year-old woman was admitted at 39 weeks gestation, for elective Caesarean Section (CS). The woman was third gravida with a history of two uncomplicated CS and an absence of notable medical history. The patient was vitally stable, on admission. Ante-natal examination was normal; symphyseal-fundal height consistent with gestation, negative abdominal tenderness, and normal uterine tone. The fetus was positioned in longitudinal lie with unengaged cephalic presentation. Cardiotocography (CTG) was reassuring.

CS was initiated with transverse skin incision, unveiling a 5cm deep vascular mass overlying the lower uterine segment; identified as right fallopian tube, right ovary and broad ligament engorgement, wrapped anteriorly. An incision was made in the inferior broad ligament window extending to the round ligament. Further dissection of the peritoneal window facilitated clamping and subsequent cutting and tying of the vascular mass. Positional anatomy was reassessed and 180° uterine rotation was diagnosed, contributing inadvertently to ligation of the right infundibulo-pelvic ligament. Uterine detorsion was performed. Lower uterine segment incision and breech extraction permitted safe delivery of alive male baby of 3900 grams. Neonate's APGAR at 1 and 5 minutes were 9 and 10, respectively. The placenta was removed by controlled cord traction and the lower segment was repaired. The remainder of the surgery was completed in the usual fashion.

The patient proceeded with an uneventful post-operative course; with normal postpartum vaginal bleeding and a haemoglobin concentration of 11 g/decilitre. Mother and newborn were discharged satisfactorily on post-operative day five. Both mother and newborn attended the 6-week postoperative

clinic in good spirits, with subsequent discharge from the clinic to the care of General Practitioner.

This case report focuses on unanticipated uterine torsion of 180° in elective CS, followed by successful delivery and repositioning of the uterus, and uncomplicated postpartum course. The well-established difficulty in preoperative diagnosis of uterine torsion stems from its variable presentation, from asymptomatic to severe acute abdomen, further compounded by the sparsity of its occurrence². Literature reports rotation ranges from 60° to 720°³. While patient symptoms are generally related to the degree and duration of uterine torsion, further studies specifying their correlation with severity of torsion are needed⁴. Notwithstanding, the limited role prenatal ultrasound, computed tomography, and magnetic resonance imaging play in prenatal diagnosis, there may be a role for artificial intelligence to retrospectively review pertinent diagnostic imaging, with a view to improving timely diagnostic rates going forward. This case highlights the current reality that uterine torsion is an exceptionally difficult diagnosis, ordinarily claimed intraoperatively⁵. It also pre-empted the onus of obstetric care on the clinician's high index of suspicion, in the context of both undiagnosed and vague symptomology. Further documentation and research on the aetiology, presentation and diagnosis of this rare and nuanced gravitas is encouraged, with a view to favourable maternal and foetal outcomes.

Declarations of Conflicts of Interest:

None declared.

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