

Uterine Torsion: A Rare Differential Diagnosis for Acute Abdominal Pain in Pregnancy

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Background

Uterine torsion (UT) in pregnancy of more than 45-degree along the longitudinal axis is rare and the aetiology remains unclear. When occurring during pregnancy, it is associated with increased perinatal mortality and maternal morbidity.(1,2,3)

Case

A 34-year-old G2P1 woman with history of 1 previous caesarean section presented at 36 weeks with acute lower abdominal pain and syncopal episode.

On arrival, she was in severe pain and had tender abdomen on examination. She was otherwise haemodynamically stable. Cardiotocography showed pathological trace with an initial prolonged bradycardia followed by a subsequent tachycardia with reduced variability. Given the history and clinical presentation, our initial diagnosis was uterine dehiscence.

She underwent an emergency caesarean section which revealed a 180-degree uterine torsion along the longitudinal axis, with oedematous left round ligament lying transverse anterior to the uterus and a segment of large bowel inferior to the round ligament. Detorsion of uterus was done prior to delivery of the foetus, and anterior uterine wall was intact with no signs of rupt-

-ure. There were no anatomical uterine abnormalities found other than stretched left ovarian and round ligaments which were repaired. Delivery was otherwise uneventful, and she was discharged on day-2 postpartum.

Discussion

Uterine torsion is a rare form of pelvic organ torsion as the uterus is supported in place by the uterine ligaments which limit the mobility of this structure. There are only a few hundred cases reported worldwide and remains a “once in a lifetime” diagnosis for obstetricians. (1) Multiple risk factors have been reported in various cases even though the actual cause of uterine torsion is unknown. The risk factors include uterine abnormalities such as anatomical deformities and uterine leiomyoma, the presence of adnexal masses, increased uterine ligaments’ flexibility in pregnancy and foetal malposition. (3)

UT causes occlusion of the uterine vessels, which leads to increased pressure rise in the placenta cotyledons causing decreased placenta perfusion and ischaemic injury of the placenta. This can then precipitate separation of placenta and preterm labour. (2,6) It is an obstetric emergency as foetal morbidity and mortality rates are high if diagnosis and delivery are delayed. Diagnosis is difficult as most women present with non-specific symptoms and one-third of them can be asymptomatic. (2)

Diagnosing uterine torsion hence requires a high index of suspicion when all other causes of presenting symptoms have been ruled out. Imaging such as MRI and ultrasonography have been used to assist in diagnosing uterine torsion.

Treatment and management of uterine torsion in pregnancy will depend on the gestation of pregnancy when patients present. At term, delivery via caesarean section and detorsion of the uterus intraoperatively remains the mainstay of treatment. (5)

Conclusion

Uterine torsion should be considered a differential diagnosis of acute abdominal pain in pregnancy. It is crucial that the torsion is addressed immediately as it is associated with maternal and foetal morbidity and mortality.

References

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