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

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Abstract: Background: Uterine torsion (UT) in pregnancy of more than 45-degree along the longitudinal axis is a rare occurrence, and the aetiology remains unclear. Case: A 34-year-old G2P1 woman with a history of one previous caesarean section presented at 36+2 weeks with sudden onset lower abdominal pain, syncopal episode, and tender abdomen on examination. She was otherwise haemodynamically stable. Cardiotocography showed a pathological trace with initial prolonged bradycardia followed by a subsequent tachycardia with reduced variability. An initial diagnosis of uterine dehiscence was made, given the history and clinical presentation. She underwent an emergency caesarean section which revealed a 180degree UT 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 performed prior to delivery of the foetus, and anterior uterine wall was intact with no signs of rupture. 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: UT is rare as the number of reported cases is within the few hundreds worldwide. Generally, the uterus is supported in place by uterine ligaments, which limit the mobility of the structure. The causes of UT are unknown, but risk factors such as uterine abnormalities, increased uterine ligaments' flexibility in pregnancy, and foetal malposition has been identified. UT causes occlusion of uterine vessels, which can lead to ischaemic injury of the placenta causing premature separation of the placenta, preterm labour, and foetal morbidity and mortality if delivery is delayed. Diagnosing UT clinically is difficult as most women present with symptoms similar to placenta abruption or uterine rupture (abdominal pain, vaginal bleeding, shock), and one-third are asymptomatic. The management of UT involves surgical detorsion of the uterus and delivery of foetus via caesarean section. Extra vigilance should be taken to identify the anatomy of the uterus experiencing torsion prior to hysterotomy. There have been a few cases reported with hysterotomy on posterior uterine wall for delivery of foetus as it may be difficult to identify and reverse a gravid UT when foetal well-being is at stake. Conclusion: UT 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.

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