World Academy of Science, Engineering and Technology
International Journal of Health and Medical Engineering
Vol:15, No:09, 2021

Left Cornual Ectopic Pregnancy with Uterine Rupture - a Case Report

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Abstract : Background: An ectopic pregnancy is defined as any pregnancy implanted outside of the endometrial cavity. Cornual pregnancy, a rare variety of ectopic pregnancies, is seen in about 2-4% of ectopic pregnancies. It develops in the interstitial portion of the fallopian tube and invades through the uterine wall. This case describes a third-trimester cornual pregnancy that resulted in a uterine rupture. Case: A 38-year old Chinese lady was brought to the Emergency Department (ED) as a standby case for hypotension. She was 30+6 weeks pregnant (Gravida 3, Parous 1). Her past obstetric history included a live birth delivered via lower segment Caesarean section due to non-reassuring fetal status in 2002 and a miscarriage in 2012. She developed generalized abdominal pain. There was no per vaginal bleeding or leaking liquor. There was also no fever, nausea, vomiting, constipation, diarrhea, or urinary symptoms. On arrival in the ED, she was pale, diaphoretic, and lethargic. She had generalized tenderness with guarding and rebound over her abdomen. Point of care ultrasound was performed and showed a large amount of intra-abdominal free fluid, and the fetal heart rate was 170 beats per minute. The point of care hemoglobin was 7.1 g/dL, and lactate was 6.8 mmol/L. The patient's blood pressure dropped precipitously to 50/36 mmHg, and her heart rate went up to 141 beats per minute. The clinical impression was profound shock secondary to uterine rupture. Intra-operatively, there was extensive haemoperitoneum, and the fetus was seen in the abdominal cavity. The fetus was delivered immediately and handed to the neonatal team. On exploration of the uterus, the point of rupture was at the left cornual region where the placenta was attached to. Discussion: Cornual pregnancies are difficult to diagnose pre-operatively with low ultrasonographic sensitivity and hence are commonly confused with normal intrauterine pregnancies. They pose a higher risk of rupture and hemorrhage compared to other types of ectopic pregnancies. In very rare circumstances, interstitial pregnancies can result in a viable fetus. Uterine rupture resulting in hemorrhagic shock is a true obstetric emergency that can result in significant morbidity and mortality for the patient and the fetus, and early diagnosis in the emergency department is crucial. The patient in this case presented with known risk factors of multiparity, advanced maternal age, and previous lower segment cesarean section, which increased the suspicion of uterine rupture. Ultrasound assessment may be beneficial to any patient who presents with symptoms and a history of uterine surgery to assess the possibility of uterine dehiscence or rupture. Management of a patient suspected of uterine rupture should be systematic in the emergency department and follow an ABC approach. Conclusion: This case demonstrates the importance for an emergency physician to maintain the suspicion for ectopic pregnancy even at advanced gestational ages. It also highlights how even though all emergency physicians may not be qualified to do a detailed pelvic ultrasound, it is essential for them to be competent with a point of care ultrasound to make a prompt diagnosis of conditions such as uterine rupture.

Keywords : cornual ectopic , ectopic pregnancy, emergency medicine, obstetric emergencies
Conference Title : ICEM 2021 : International Conference on Emergency Medicine
Conference Location : London, United Kingdom
Conference Dates : September 23-24, 2021