

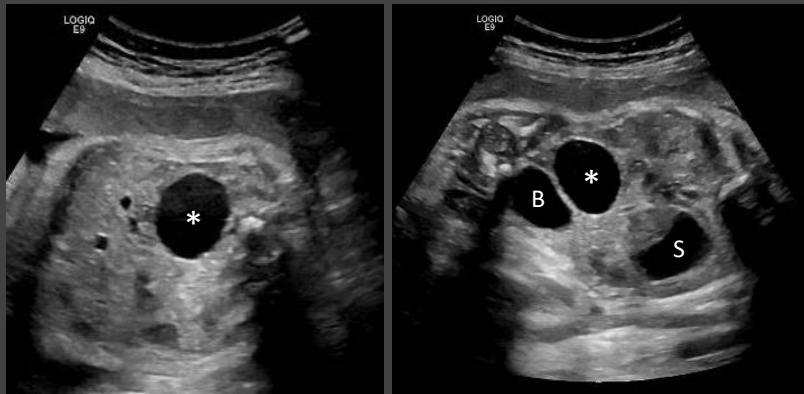
Ruptured Fetal Ovarian Cyst In Utero

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Background

Ovarian cysts are the most common intra-abdominal mass found in female fetuses and are considered to arise from exposure to elevated maternal and placental hormones (1). Risk factors are maternal diabetes, pre-eclampsia, and Rhesus isoimmunisation (1). Fetal ovarian cysts are usually benign and unilateral; complications include torsion, cyst rupture or haemorrhage, and compression of other viscera (2).



*: ovarian cyst; B: bladder; S: stomach

Case

This case describes a ruptured fetal ovarian cyst with ascites and polyhydramnios in a 35-year-old G2P1 woman with a history of one previous caesarean section. Besides recurrent antepartum haemorrhages from 30 weeks, the pregnancy was uncomplicated, with a low-risk MSS1, normal morphology, and negative glucose challenge (polycose) test.

A left-sided, thin-walled cyst in the fetal pelvis, measuring 24x26x25mm was first identified on ultrasound at 31+2 weeks. Follow up ultrasound at 33+3 showed moderate fetal ascites and no evidence of the cyst. At 34+3 she presented with threatened pre-term labour and new polyhydramnios on bedside scan. She was then transferred to a tertiary unit, where repeat ultrasound at 35+0 showed increased fetal ascites with polyhydramnios and echogenic bowel, suspicious for fetal bowel rupture. The baby was delivered by emergency caesarean section that day, then proceeded to theatre for an exploratory laparotomy several hours later. A ruptured ovarian cyst measuring 5cm was excised plus 400ml of ascites and the bowel was completely normal. The baby recovered well and was discharged on day 20 of life.

Discussion

Complications such as polyhydramnios are thought to arise from impaired fetal swallowing, occurring due to increased pressure on the bowel from the cyst (2). Ascites may result from cyst rupture or transudation due to partial obstruction of the gastrointestinal tract (1).

Management of fetal ovarian cysts can be conservative or surgical. Treatment options include surveillance, intrauterine aspiration, or postnatal surgery (2). Surgical management is recommended when there are complicating features such as torsion, ascites, or signs of bowel obstruction including polyhydramnios (3). The literature therefore supports expedited delivery and surgery as the most appropriate treatment modality in this case, given the presence of increasing ascites, polyhydramnios, and concern for bowel rupture.

References

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