An antenatal diagnosis of a rare, malignant sex cord stromal tumour of the ovary.

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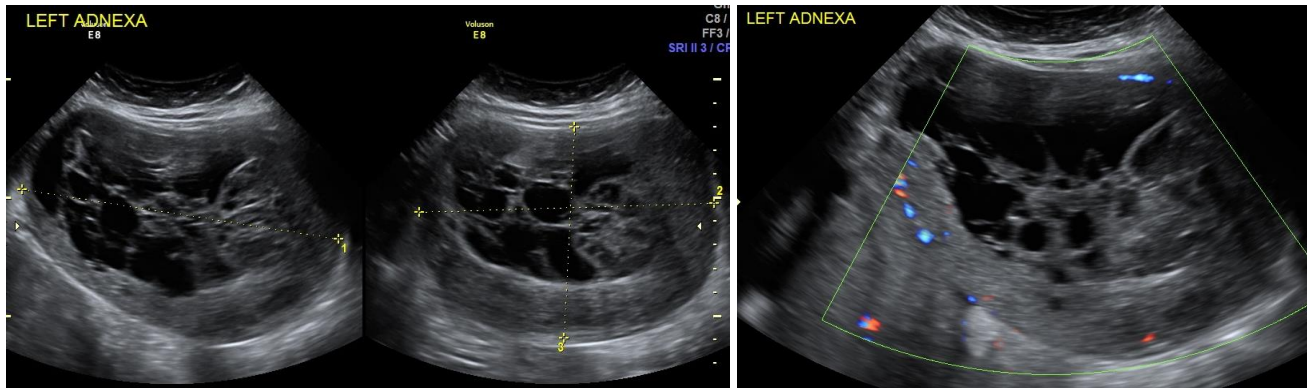
Introduction

- Ovarian sex cord-stromal tumours make up 7% of ovarian tumours[1]
- They are classified as pure stromal tumours, pure sex cord tumours, or mixed ('Sertoli-Leydig') sex cord-stromal tumours[2]
- It is rare to diagnose an unclassified, or mixed sex cord-stromal tumour as described in this case, especially antenatally in an asymptomatic patient[3]

Case (Presentation)

- 34-year-old female, G7P1. History of 6x early miscarriages (unexplained)
- This pregnancy: IVF
- USS at 29/40 showed left adnexal mass 63x45x58mm (not seen on any prior imaging) ?pedunculated fibroid
- Tertiary USS at 34+6/40 (see below) revealed a growing adnexal mass 137x127x89mm (volume: 813cc) with complex features. Normal fetal growth and wellbeing.
- MRI at 35/40 showed the mass was ovarian in origin with highly concerning features favouring a primary neoplasm. CA-125 = 38

Ultrasound Images



Case (Management)

- 35+1/40 the patient underwent an elective caesarean section via midline laparotomy, left oophorectomy, salpingectomy, and omental biopsy
- Histopathology: sex cord stromal tumour with atypical features (nuclear atypia and high mitotic count in keeping with malignancy)
- 2nd opinion sought, but tumour still unable to be further subclassified based on morphology, however the favoured diagnosis was a poorly differentiated Sertoli-Leydig cell tumour
- The tumour was DICER1 mutation positive, added to the rare tumour database and patient referred to genetics unit to consider germline testing
- No malignancy on omentum or ascites
- The patient made a good postoperative recovery and did not require chemotherapy
- Follow up CT and MRI at 1- and 4-months post-op respectively showed no evidence of local recurrence or metastatic disease

Discussion

This case reports a good outcome for a patient with a rare malignant sex cord stromal tumour of the ovary, who will continue to be followed up via regular surveillance CT/MRIs.

1. Horta M, Cunha TM. Sex cord-stromal tumors of the ovary: a comprehensive review and update for radiologists. Diagn Interv Radiol. 2015 Jul-Aug;21(4):277-86.
2. Al Harbi R, McNeish IA, El-Bahrawy M. Ovarian sex cord-stromal tumors: an update on clinical features, molecular changes, and management. International Journal of Gynecologic Cancer 2021;31:161-168.
3. Blake EA, Carter CM, Kashani BN, Kodama M, Mabuchi S, Yoshino K, Matsuo K. Feto-maternal outcomes of pregnancy complicated by ovarian sex-cord stromal tumor: a systematic review of literature. Eur J Obstet Gynecol Reprod Biol. 2014 Apr;175:1-7.