Diffuse peritoneal deciduosis in a heterotopic pregnancy

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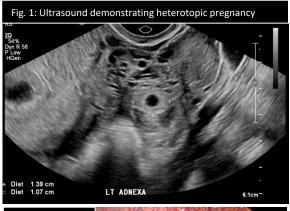
Background

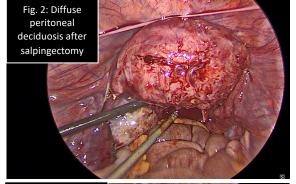
- Heterotopic pregnancy is a rare phenomenon occurring in an estimated 1 in 30,000 spontaneous pregnancies. Due to its rarity, diagnosis of heterotopic pregnancy is often delayed due to the early reassurance of an intrauterine pregnancy on ultrasound
- This case report aims to describe a rare case of heterotopic pregnancy in the rural setting with unexpected intraoperative findings.

Case

- A 25-year-old gravida three para two at five weeks and 6 days gestation, who had no risk factors for heterotopic pregnancy, presented to a rural emergency department with abdominal cramps and per vaginal bleeding. On arrival, she was haemodynamically stable and had a soft abdomen with no adnexal tenderness on bimanual examination. The haemoglobin level was 140g/L and the β-hCG level was 20,060 IU/L.
- Transvaginal ultrasound demonstrated an intrauterine gestation sac of 12mm with a normal yolk sac, but no fetal pole seen. There was also a left adnexal ectopic gestational sac of 8mm identified which contained a yolk sac, but no fetal pole. There was free peritoneal fluid in the Pouch of Douglas with internal echoes.
- A heterotopic pregnancy was strongly suspected and the patient was transferred to a larger regional centre for laparoscopy, which demonstrated a left-sided ruptured tubal ectopic pregnancy with 80ml of haemoperitoneum. A left salpingectomy was performed to remove the tubal ectopic pregnancy, without instrumentation of the uterus. An unusual appearance of the peritoneal tissue was noted and multiple biopsies taken.

Results and Discussion







- This case describes a heterotopic pregnancy in a woman with no risk factors who was identified in a rural setting, and safely transferred and managed by laparoscopic salpingectomy in a larger regional centre. Intraoperatively, the patient was found to have an unusual appearance of the peritoneum which posed several possible differential diagnoses including endometriosis or peritoneal carcinomatosis.
- The intrauterine pregnancy continued to progress normally following salpingectomy. Peritoneal biopsy demonstrated peritoneal deciduosis.
- The case emphasises the importance of high-quality pelvic ultrasound including visualisation of the adnexae in recognising heterotopic pregnancy, particularly in the rural setting where access to an operating theatre can be limited. With the rise in heterotopic pregnancies with assisted reproductive technology, it also demonstrates the need to use caution in instrumenting the uterus at laparoscopy when an intrauterine pregnancy has not been excluded.
- Diffuse peritoneal deciduosis is an uncommon incidental finding thought to be caused by progesterone-induced metaplasia of the sub-coelomic mesenchymal cells which resolves spontaneously following pregnancy¹. There is no association described in the literature between ectopic pregnancy and peritoneal deciduosis.

References

1. Bolat F, Canpolat T, Tarim E. Pregnancy-related peritoneal ectopic decidua (deciduosis): morphological and clinical evaluation. Turk J Pathol 2012;28:56–60