Optimizing Ovarian Preservation during Laparotomy and of Ovarian Ectopic Pregnancy in a Young Woman -A Case Study Dr. C. Detchou, MD, Department of Obstetrics & Gynaecology, Cairns Hospital Dr. B. Armstrong, FRANZCOG, Greenslopes Private Hospital

Background. Ovarian ectopic pregnancy is a rare form of ectopic pregnancy occurring in only 1-3% of all ectopic pregnancies.

Aims. This case reports aims to demonstrate an example of ovarian preservation in a young woman following resection of an ovarian ectopic pregnancy.



Figure 1.

A. Ultrasound pelvic. Longitudinal view of uterus. No intrauterine pregnancy visualised.B. Ultrasound pelvis. Longitudinal view of Right adnexa. Notable complex irregular right adnexal mass suggestive of gestational sac containing a fetal pole

Case. A 23-year-old primigravida presented to the emergency department at ~5+3 weeks' gestation by dates with severe right iliac fossa pain, and haemodynamic decompensation with tachycardia and hypotension. Her Haemoglobin was 88. She was tender on abdominal examination without peritonism. Her serum human gonadotropin hormone (hCG) was 10,321IU/L. An urgent ultrasound showed a complex irregular mass within the right adnexa suggestive of a gestational sac containing a yolk sac and, a fetal pole measuring 10+0 weeks. No intrauterine pregnancy was visualised. There was a large amount of free fluid seen in the abdomen and pelvis, including the subphrenic space on the right side. She underwent an emergency laparotomy where 1500mL of hemoperitoneum was evacuated.

Following evacuation of hemoperitoneum, it was noticed that both fallopian tubes were normal with no obvious tubal ectopic pregnancy or tubal rupture. A large right ovarian mass was noted which was initially thought to be an enlarged corpus luteal cyst, however on further inspection was found to be an ovarian ectopic pregnancy with rupture through the ovarian cortex. a notable right ovarian ectopic pregnancy. The ectopic pregnancy was removed via right ovarian wedge resection for ovarian preservation. The left ovary was normal. There was no instrumentation of the uterus during the procedure.

Results. The young women recovered well postoperatively. There were no acute post-surgical complications. She received weekly follow-up with serial hCG levels. There was > 90% hCG drop a week post-op (885 IU/L). Her most recent HCG level 6 weeks after the operation was 6 IU/L. Interestingly, histopathology did not show any clear evidence of an ovarian ectopic pregnancy. An assessment of ovarian function was not immediately indicated as the patient had no immediate desire to conceive.

Discussion. This case report showcases the persevering challenges related to reliable diagnosis of ovarian ectopic pregnancy prior to surgical intervention. It also provides a clinical example of ovarian preservation with wedge resection technique following a ruptured ectopic pregnancy.



References. Hans, P. and Gunjan, G. (2022) 'Ovarian pregnancy', Cureus [Preprint]. doi:10.7759/cureus.31316 | Solangon, S.A., Naftalin, J. and Jurkovic, D. (2024) 'Ovarian ectopic pregnancy: Clinical characteristics, ultrasound diagnosis and management', Ultrasound in Obstetrics & amp; Gynecology, 63(6), pp. 815–823. doi:10.1002/uog.27549.

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