

Case Report of Minimally invasive approach to controlled drainage and cystectomy of a large multicystic pelvic complex with volume of greater than 11 litres

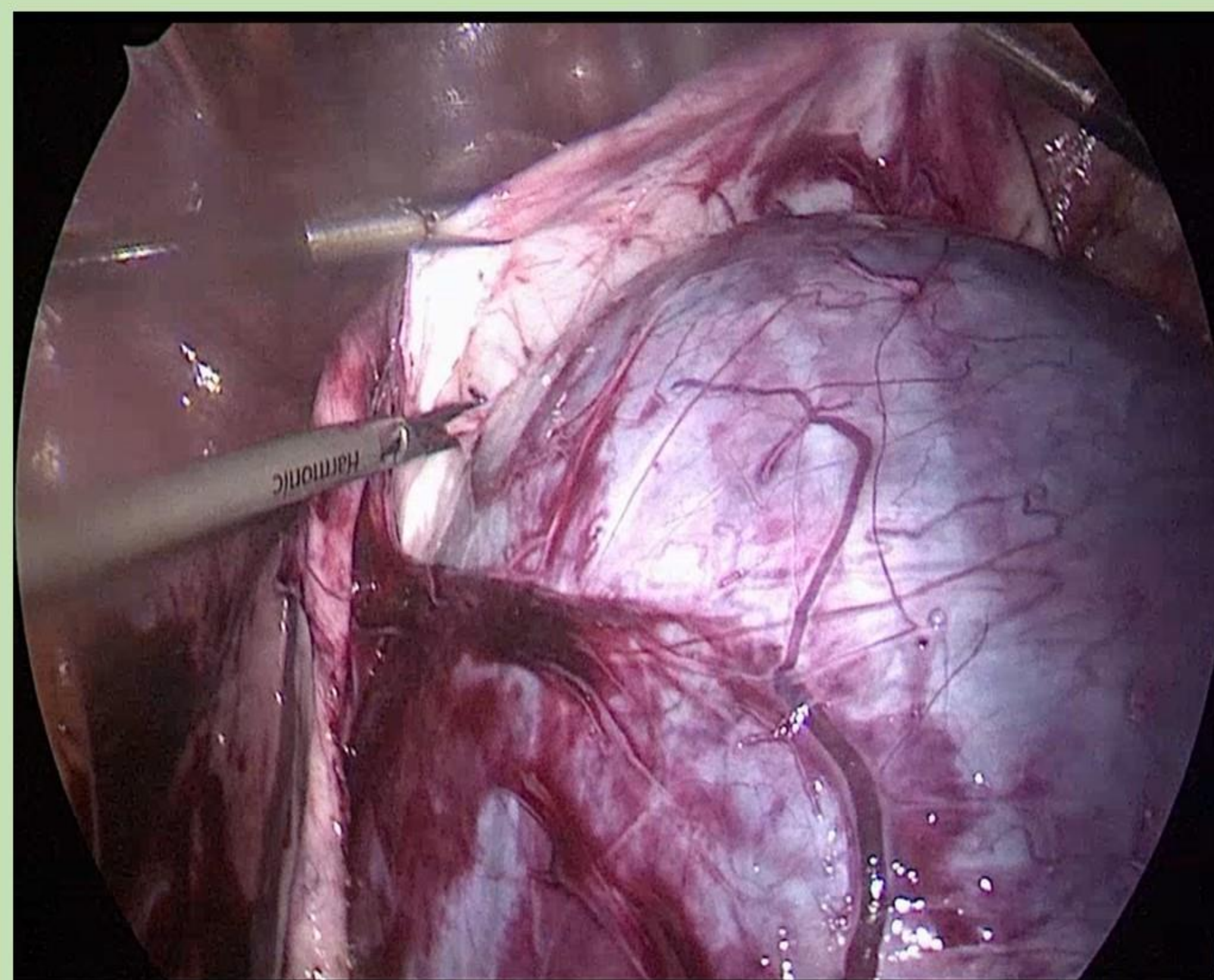
Introduction;

Minimally Invasive Gynaecologic surgery (MIGS) is a type of gynaecologic surgery that involves smaller incisions and shorter recovery time. However MIGS is for patients with specific conditions such as endometriosis, ovarian cysts, fibroids and others

Case Report:

We present a case of a 25 year old female, who presented to the Emergency Department with acute abdominal pain, nausea and vomiting. On examination, her abdomen was distended with a palpable large tender mass arising from the left lower quadrant of the abdomen.

A pelvic ultrasound found a large multicystic structure extending from the pelvis to the upper abdomen measuring 38 x 13 x 26 cm, with an estimated volume of 6.8 litres. The cystic structure contains multiple septa, an echogenic area measuring 6 x 2 x 4 cm and some hypoechoic areas. Tumour markers were normal. The patient was discharged with a plan for follow up in the outpatient clinic for investigations and planning for surgical management.

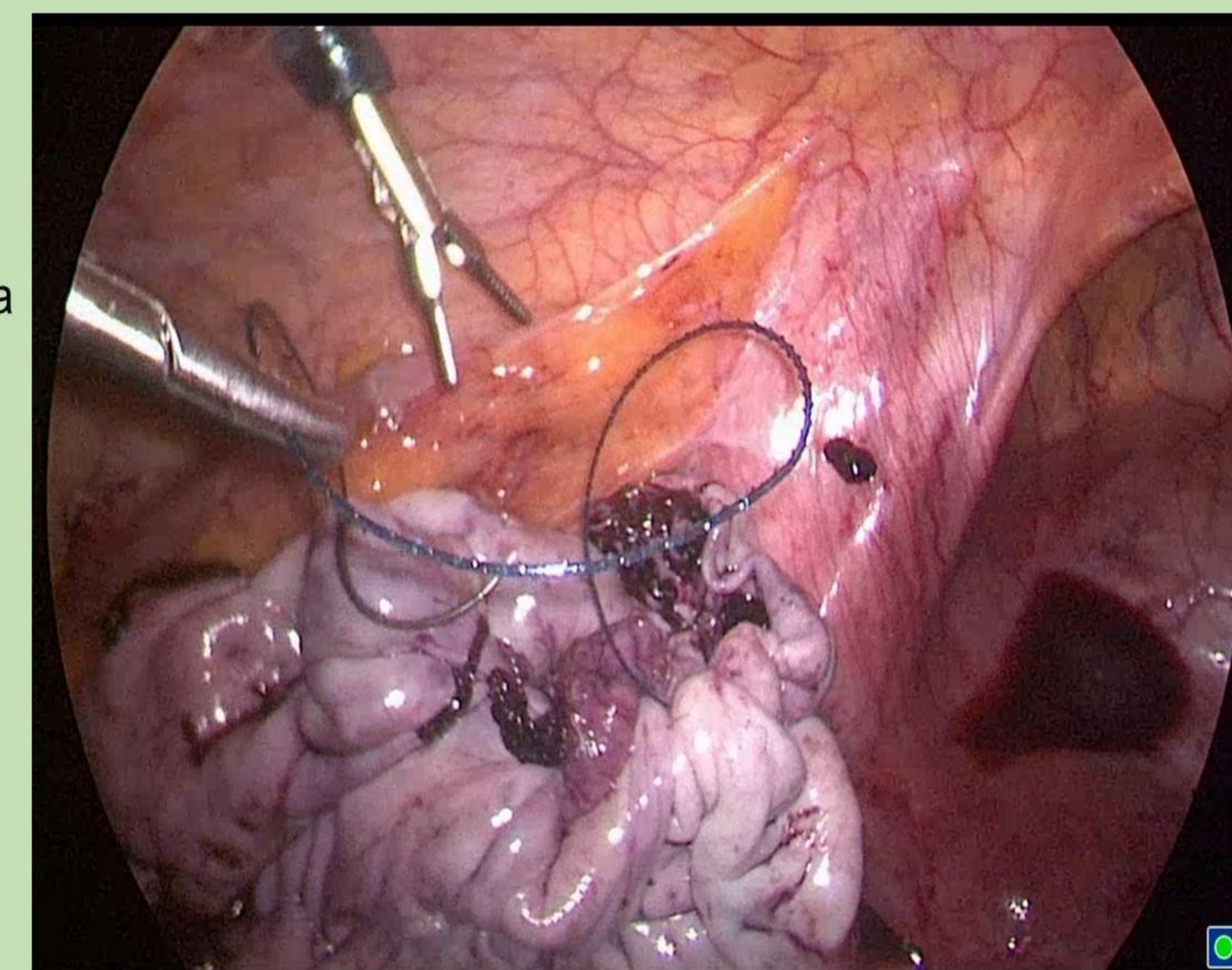


An MRI Abdomen and Pelvis showed a large multicystic lesion in the abdomen and pelvis, beginning in the region of the right adnexa and extending superiorly, nearly reaching the inferior angle of the liver. The mass consisted of three large cysts (upper, middle and lower), with total dimensions of 40cm vertically, 27cm transversely, and had an anteroposterior span of 13 cm, with areas of fatty density, representing a mature cystic teratoma/dermoid cyst. The patient was consented for a diagnostic laparoscopy, unilateral +/- bilateral cystectomies +/- oophorectomy.

Procedure:

After general anaesthesia, the abdomen was entered via an umbilical Hasson entry of approximately 2.5cm in length, with a mini-Alexis retractor inserted. This incision was immediately overlying the middle cyst component. A purse-string suture was applied to the superficially to the epithelium of the ovary around the site of planned incision and a controlled incision with drainage via immediate insertion of the suction catheter into the cyst was performed. The purse string suture was tightened around the suction catheter to avoid spillage. 2000ml of fluid was drained, and the purse-string suture was tied to close the incision site. A mini Gel-Port cap was applied over the Alexis retractor with a 12mm port inserted through the Gel-Port.

The abdomen was insufflated and a laparoscopic cystectomy of the middle component was performed. The upper (Largest) component of the cyst was mobilised into the mid-abdomen, and the Gel-Port cap was removed. A similar technique with a purse-string suture with controlled incision and drainage was performed, with a total of 9000ml of fluid suctioned. The upper cyst was exteriorised through the Alexis retractor and a cystectomy was performed manually. The abdomen was re-insufflated after the mini Gel-Port cap was reapplied, and a laparoscopic cystectomy was performed to remove the remaining (smallest) lower cyst.



Follow up:

The patient was discharged after completing 24 hours course of antibiotics and was followed up in the outpatient setting to discuss the histopathology results of a mature cystic teratoma

References

- Royal College of Obstetricians and Gynaecologists. Management of Suspected Ovarian Masses in Premenopausal Women. Green-top Guideline No. 62. London: RCOG, 2011.
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- Yeoh M. Investigation and management of an ovarian mass. Aust Fam Physician. 2015;44(1-2):48-52.

