

Introduction & Methods

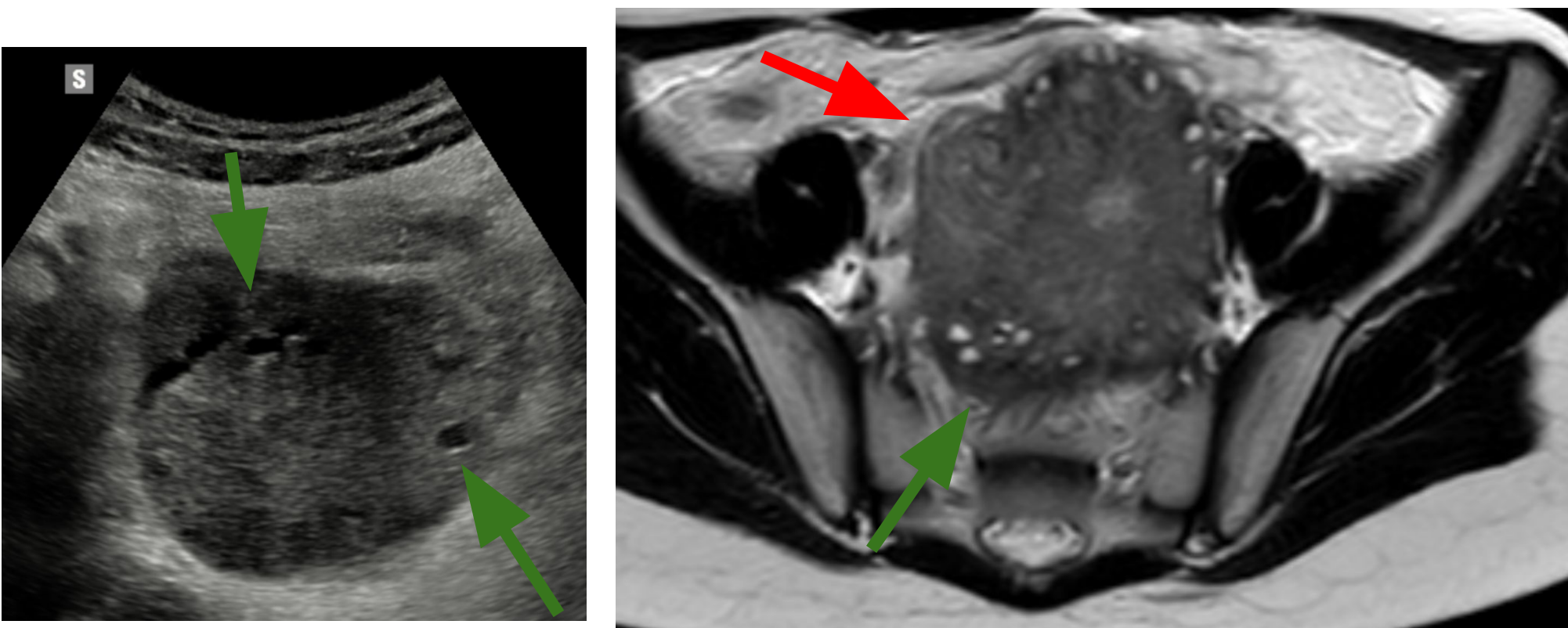
Acute abdominal pain has a wide differential in the paediatric population
Gynaecological conditions are an important differential for female patients
Through a retrospective case series from a single district general hospital, we aim to highlight a variety of acute paediatric gynaecological presentations on US and MRI

Ovarian Torsion

Hx - 10F with 10 days of RIF pain; WCC 17; ?Appendicitis

Findings on US/MRI:

- Enlarged left ovary located in the midline with **twisted pedicle** and **peripheral follicles** (string of pearls)



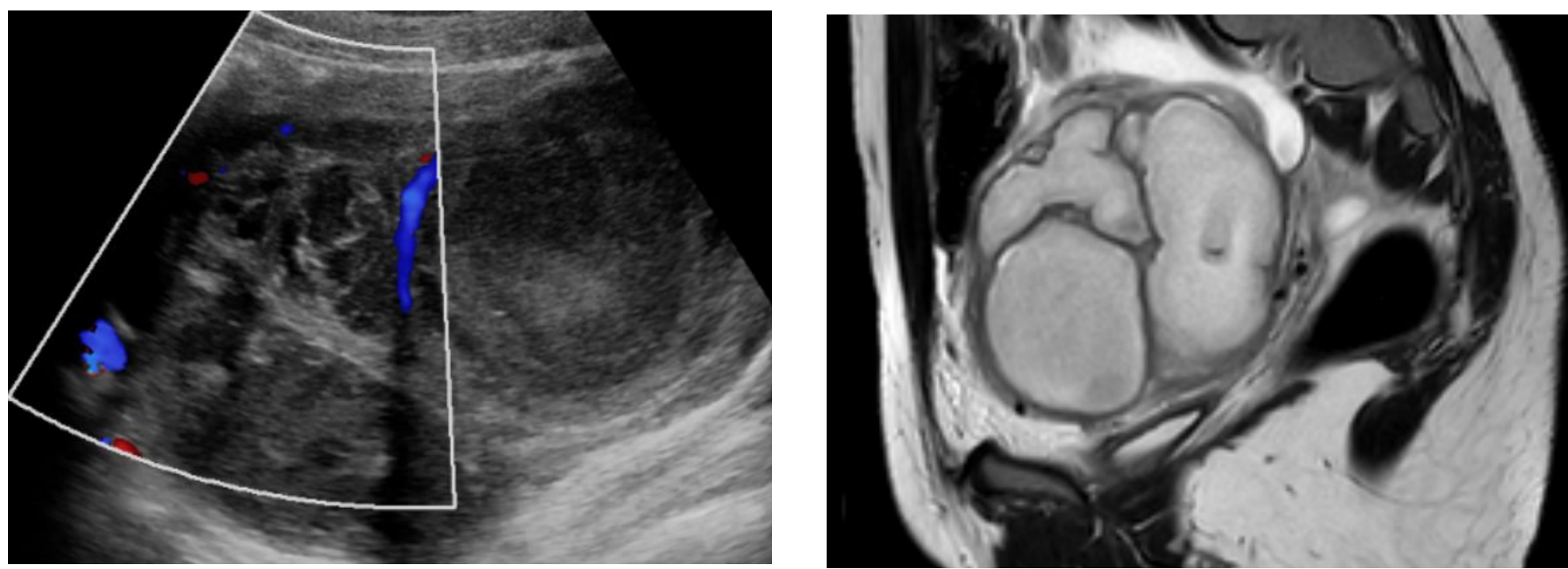
Tubo-Ovarian Abscess

Hx - 17F recurrent RIF / pelvic pain; not sexually active

Findings on US/MRI:

- 9.5cm right adnexal lesion with peripheral vascularity
- Multiloculated T2-bright, restricting lesion = abscess

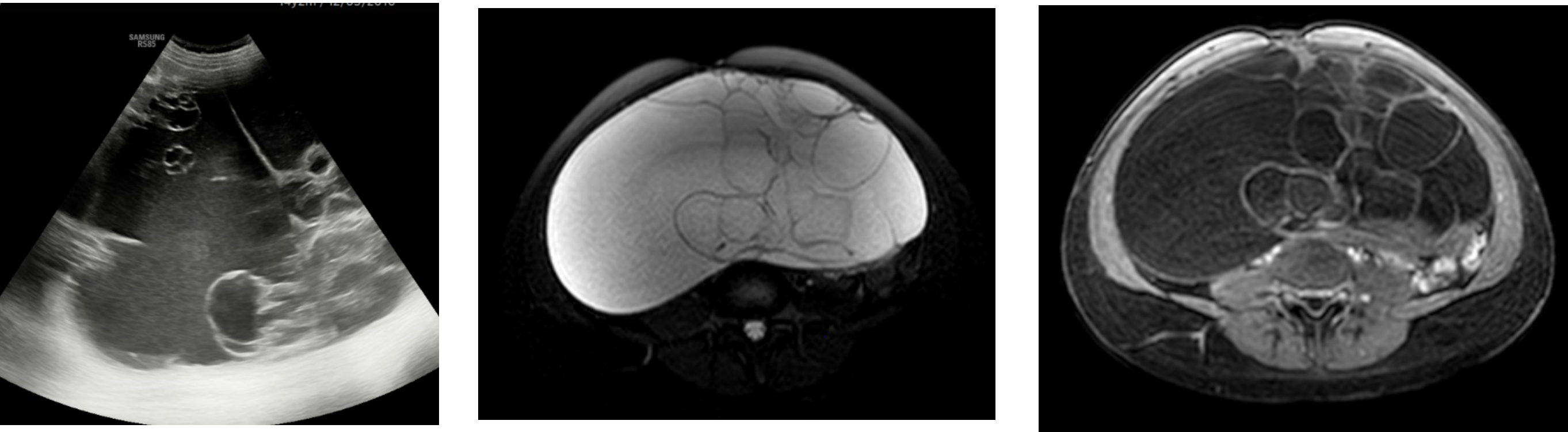
Subsequently drained - *E.coli* and *Strep constellatus*



Benign & Malignant Ovarian Tumours

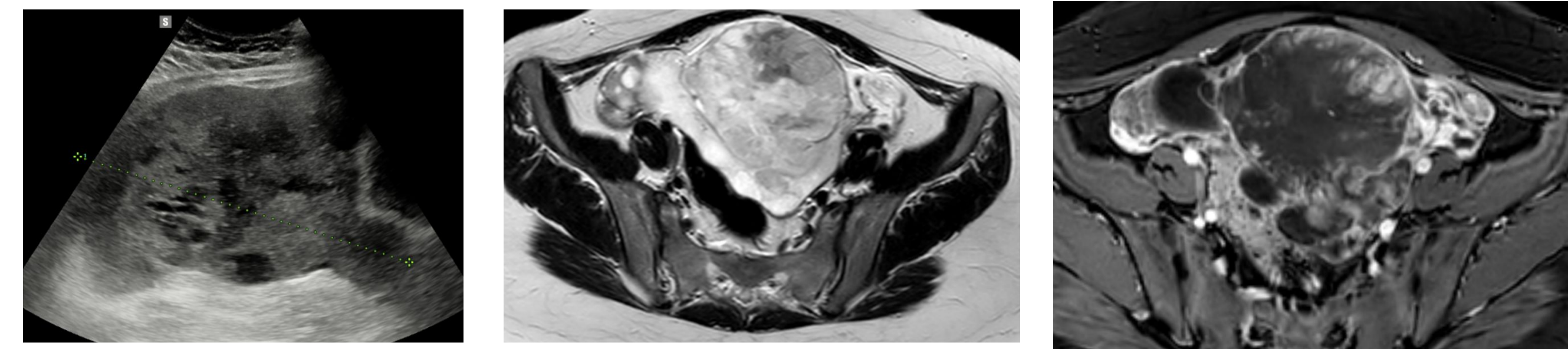
Hx - 14F Abdominal distension, GI symptoms for a few months, vomiting and constipation with abdominal pain. No evidence of constipation on AXR

Histology - Stage 1a borderline mucinous ovarian tumour



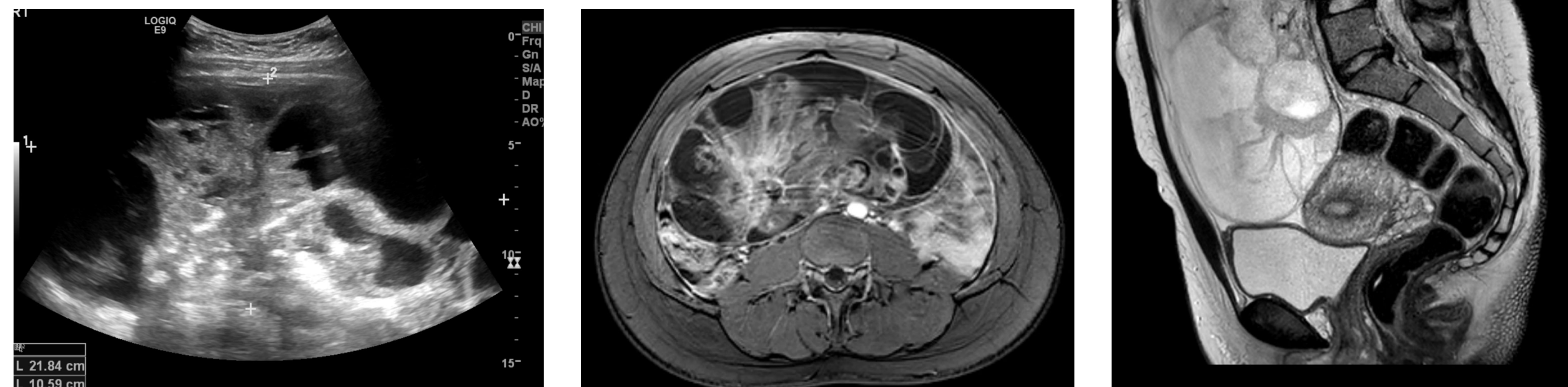
Hx - 14F abdo pain for 1 week in RIF; loose stool for 24 hours; ?appendicitis

Histology - Yolk sac tumour ovary stage 3c



Hx - 15F 2 weeks of ongoing abdo distension and RIF pain, now moved to LIF

Histology - Stage 1a Grade 1 immature teratoma of the left ovary



Concerning Features for Ovarian Cysts

Indications for further surgical evaluation include¹:

- Any solid component especially if vascular
- Septations: multiple or thick
- Focal wall thickening
- Associated features: ascites, peritoneal masses, lymph node enlargement without any alternative explanation

1: Strachowski, L. M. et al. O-RADS US v2022: An Update from the American College of Radiology's Ovarian-Adnexal Reporting and Data System US Committee. Radiology vol. 308 (2023).

Haematocolpos/metra

Hx - 13F with acute urinary retention

Findings:

- US: Distended vagina with hypoechoic contents with posterior acoustic enhancement
- MRI: Layered high T1/T2 signal in the **vaginal canal** and **uterus**

Secondary to imperforate hymen

