

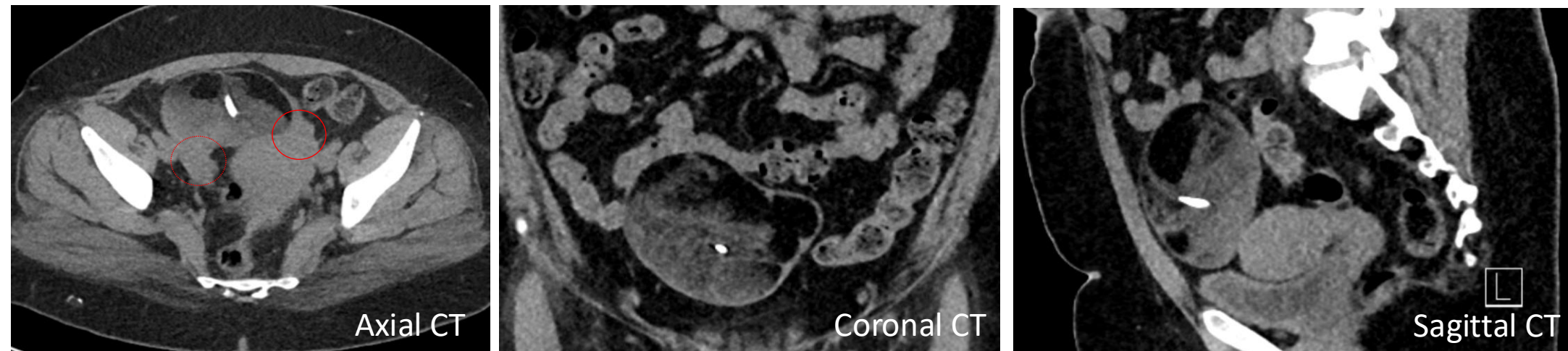
Introduction

- Ovarian torsion is a rare but important diagnosis which occurs in women of any age. The 6 patients below presented with abdominal pain.
- Commonly due to benign pathology but occasionally due to malignant conditions, particularly in postmenopausal patients.
- Imaging biomarkers can help to identify torsion, leading to earlier diagnosis and treatment.

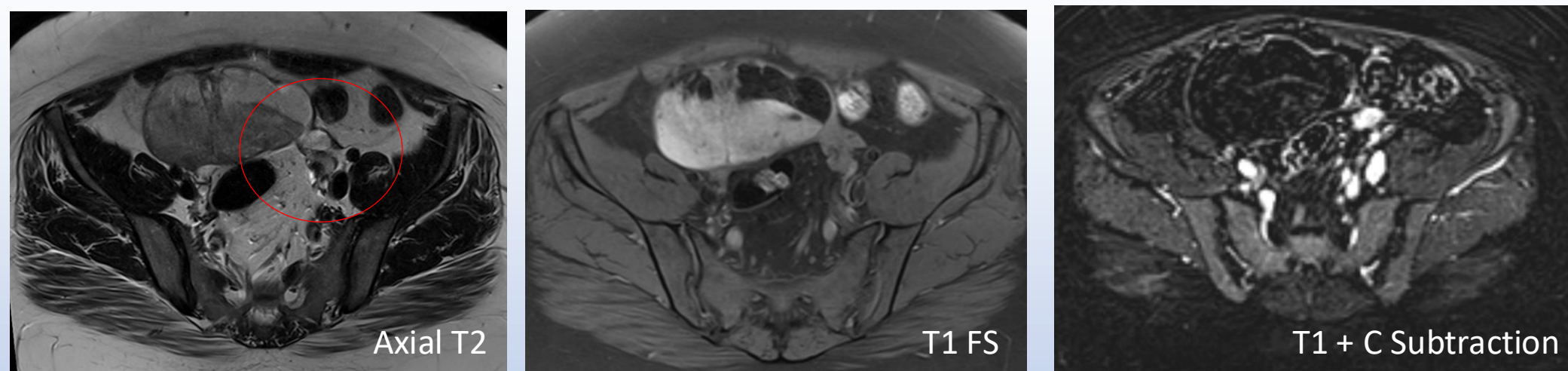
Aims

- Showcase a range of important aetiologies of ovarian torsion.
- Highlight key imaging biomarkers of torsion.

Mature Teratoma with Torsion, 42F

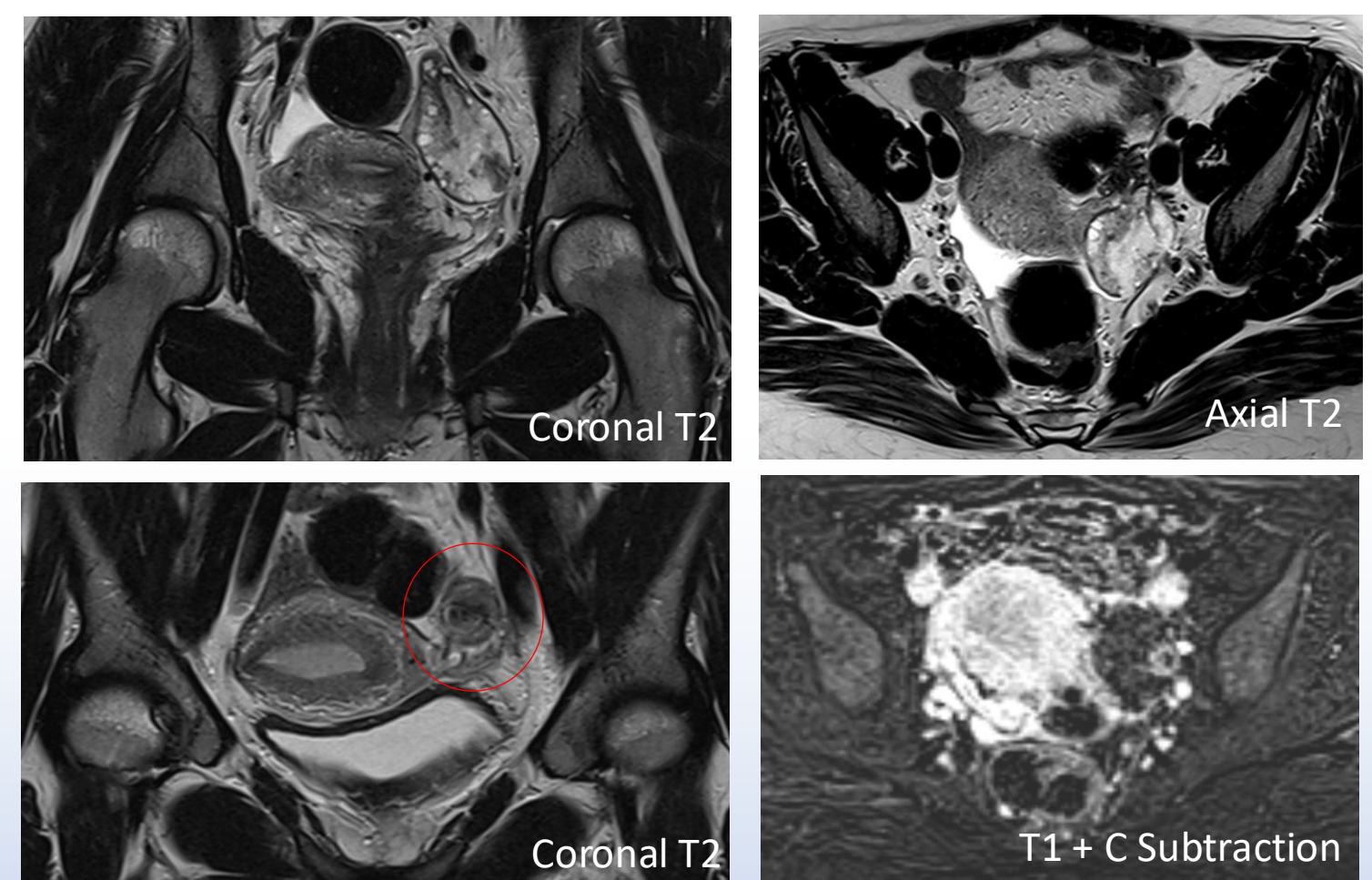


Unenhanced CT: 10cm left side dermoid with midline shift to the right and twisted pedicle (red circle), normal right ovary (dashed circle).



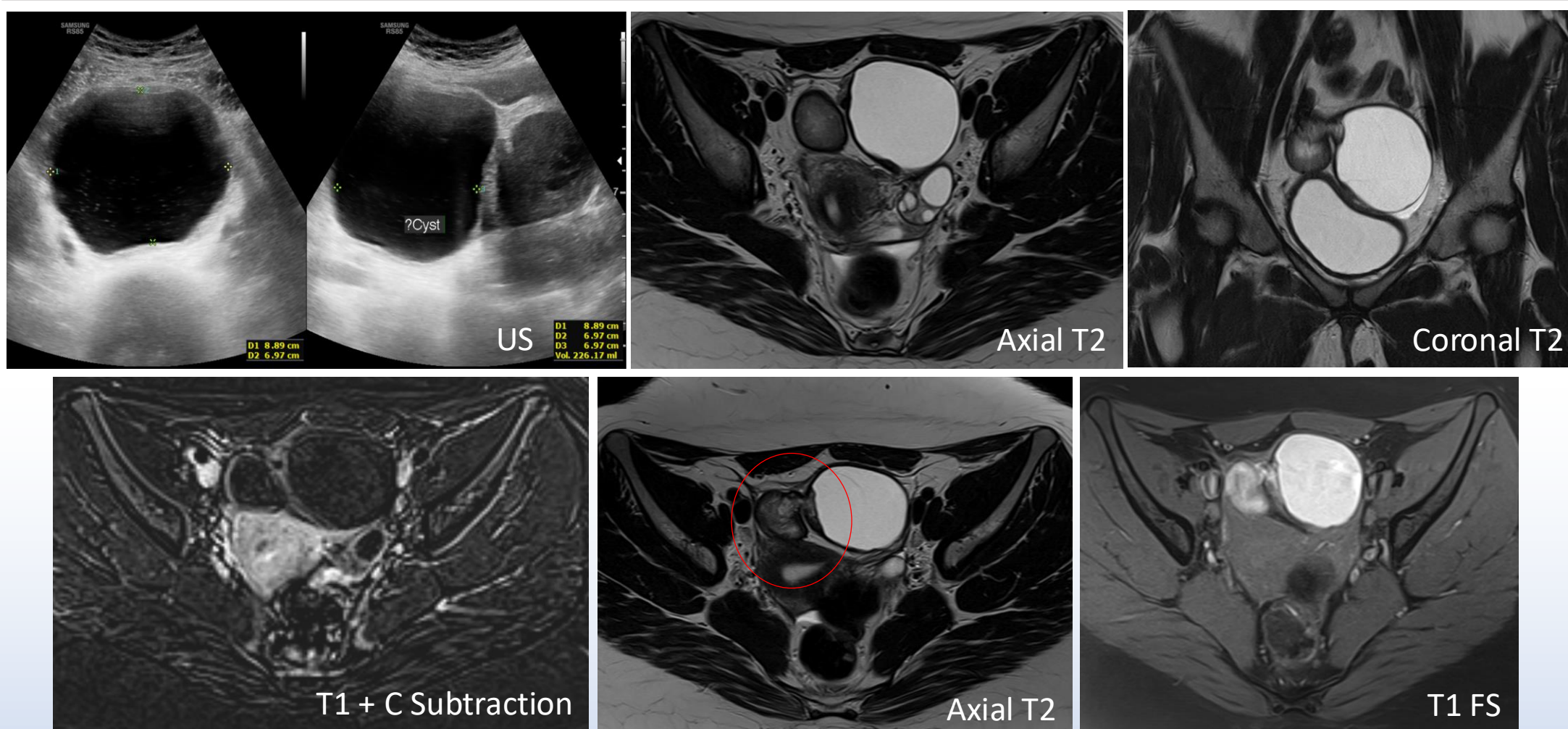
MRI pelvis: Macroscopic fat in keeping with a dermoid and a twisted enlarged pedicle (red circle).

Torsion Secondary to a Lengthened Suspensory Ligament, 24F



MRI: Enlarged left ovary with multiple peripheral ovaries, a twisted pedicle with whirlpool sign (red circle) and minimal enhancement. At surgery, there was an abnormally long suspensory ligament. This patient had a solitary left ovary due to previous torsion.

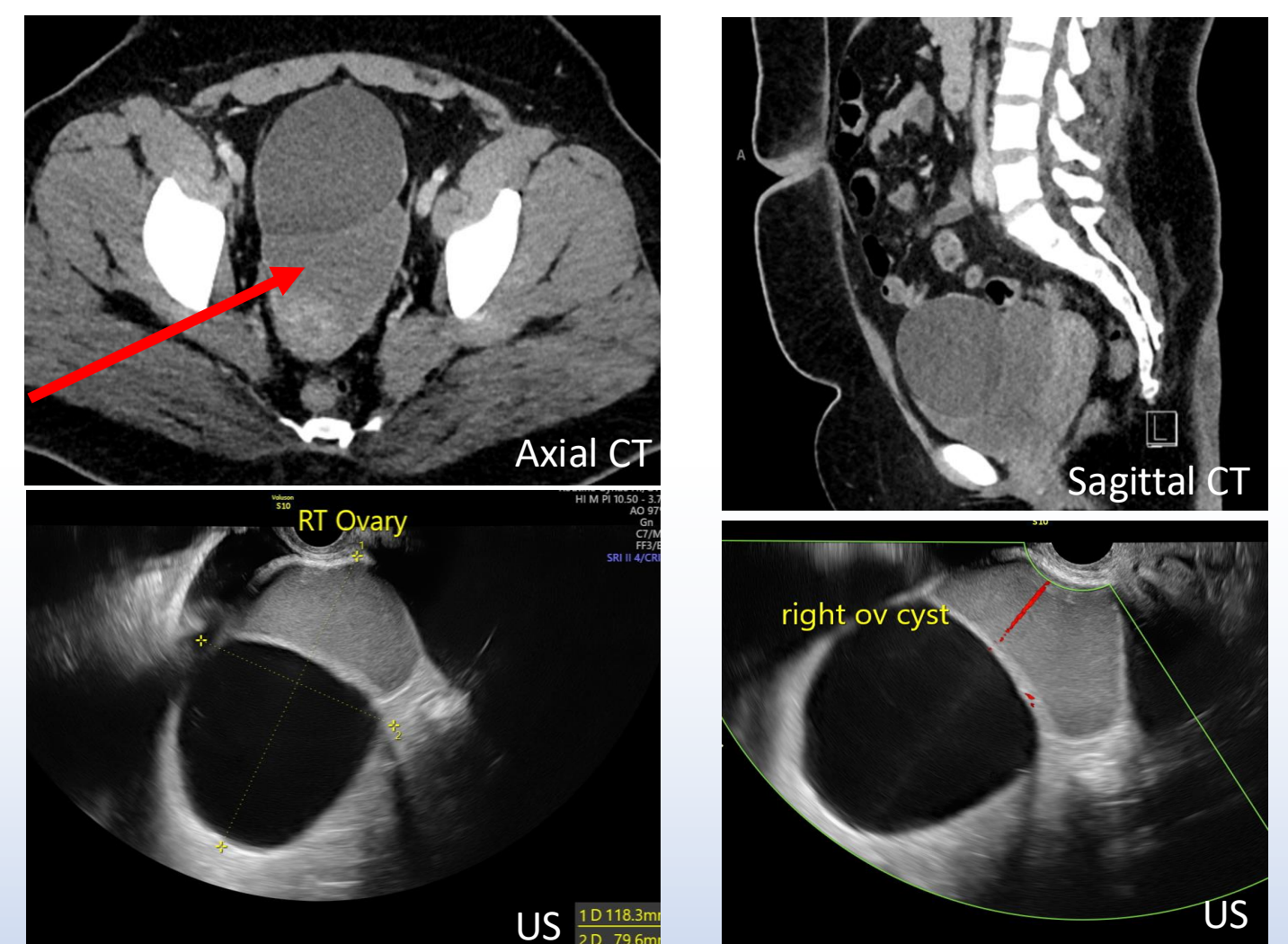
Benign Serous Cystadenoma with Torsion, 15F



US: Two large abdominal avascular structures, one anechoic and one containing internal echoes.

MRI: Complex cystic structures from the right ovary with twisting of the pedicle with a tortuous tube (red circle) with midline shift to the left and absent enhancement.

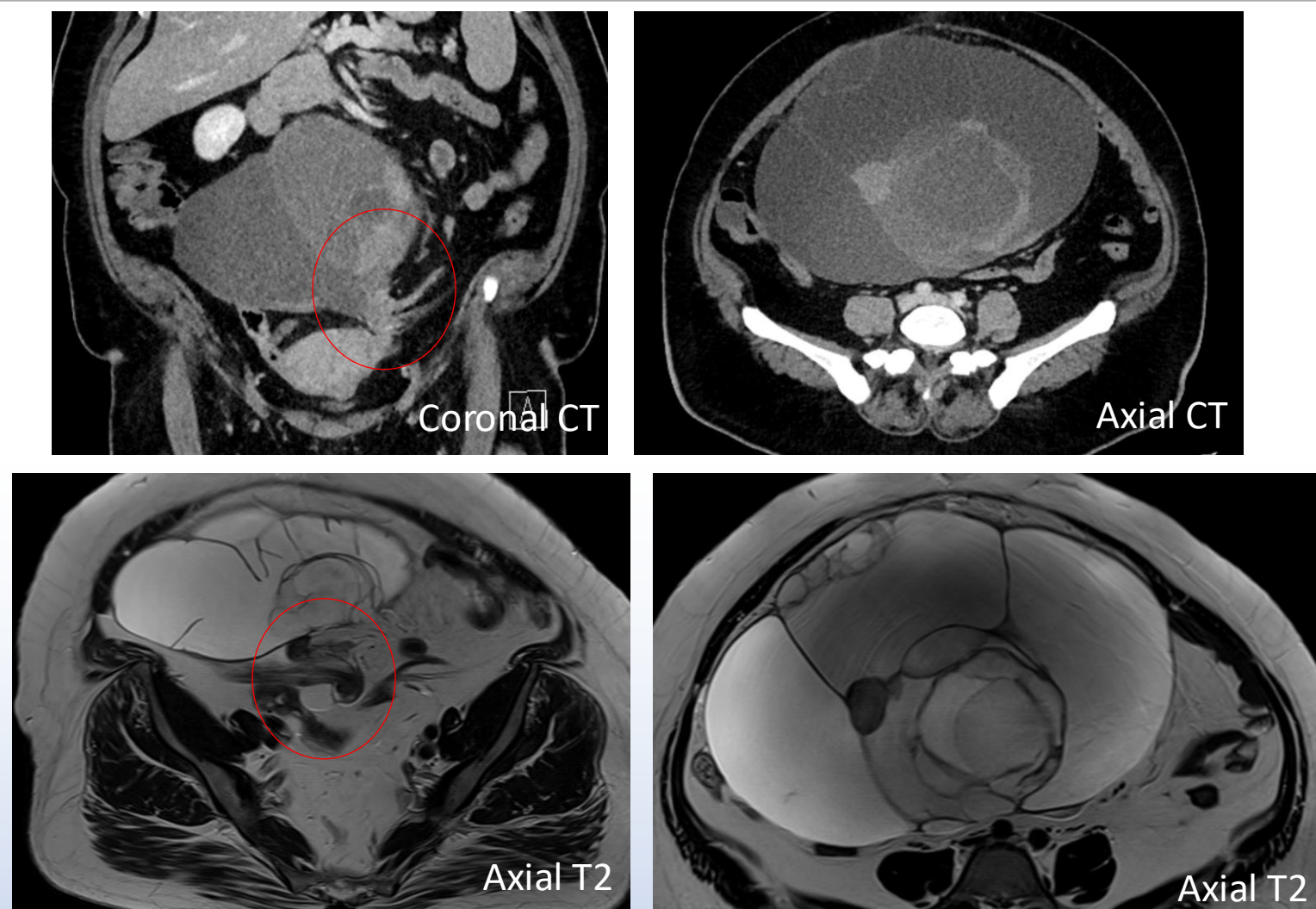
Serous Borderline Tumour with Torsion, 24F



CTAP: Enlarged right ovary posteriorly (red arrow), with an ovarian cyst anteriorly.

US: Enlarged, avascular right ovary with a large ovarian cyst and free pelvic fluid.

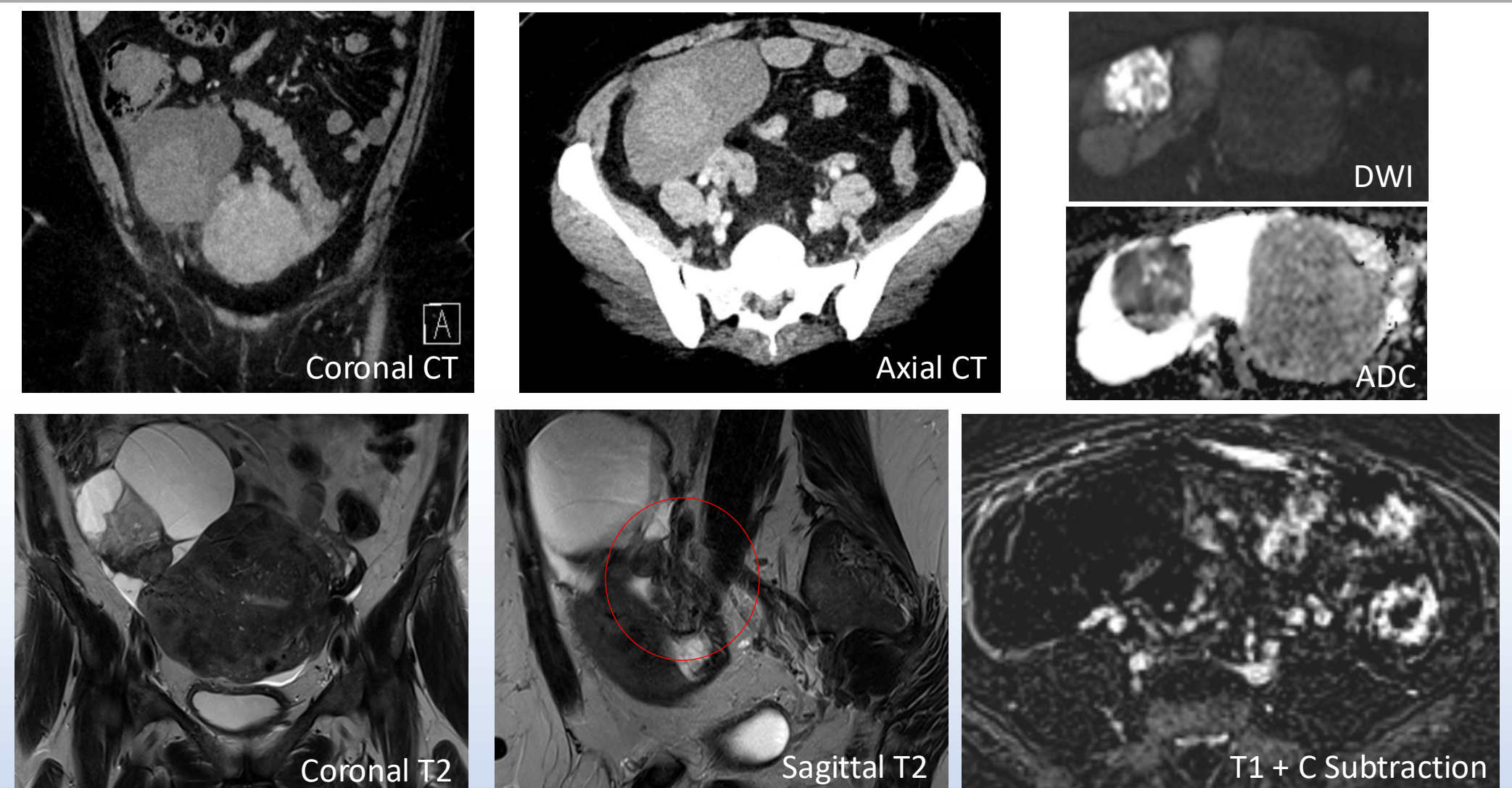
Borderline Mucinous Tumour with Torsion, 45F



CT: 26cm multiseptated left adnexal mass with soft tissue component and associated twisting of the left ovarian pedicle (red circle).

MRI: Left adnexal mass suspicious for primary tubo-ovarian malignancy with twisting of the pedicle.

High Grade Serous Carcinoma with Torsion, 55F



CT: Solid/cystic collection with stranding in the right iliac fossa.

MRI: Heterogenous adnexal mass with twisted pedicle (red circle), restricted diffusion and but no enhancement.

Conclusion

Ovarian torsion can occur in women of any age, with a broad spectrum of causes and therefore dedicated assessment for imaging biomarkers of torsion and other ancillary findings is important.

Take Home Message

Consider torsion in any age group presenting with abdominal pain and although rare, malignant adnexal masses can also undergo torsion and may not demonstrate typical enhancement due to this.