

(EP01.46). Leiomyoma ovary with a pinch of salt!

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Case Report : Primary ovarian leiomyoma is an exceedingly rare benign tumour, accounting for less than 1% of all ovarian neoplasms. Due to its rarity and nonspecific imaging features, it frequently mimics other solid tumours such as fibroma and thecoma. We present a 39 years old asymptomatic lady who was referred for pelvic ultrasound as part of an evaluation for oocyte cryopreservation. She had no pelvic complaints and no significant past gynaecological history. Ultrasound showed an irregular heterogeneous hypoechoic solid lesion in the right ovary measuring 2.3 x 2.0 x 1.5 cm Fig1. Doppler showed increased vascularity with a colour score of 3, displaying both central and peripheral vascularity. 3D power Doppler displayed abnormal vascular morphology Fig 2. The left ovary was normal. Pelvic MRI revealed solid ovarian neoplasm isointense on T1 and hypointense on T2 with heterogenous post contrast enhancement. Serum CA-125 levels were within normal limits. The patient subsequently underwent Robotic right sided salpingoophorectomy. Intraoperatively, a solid, firm lobulated mass was identified within the right ovary Fig 3. Frozen section revealed benign nature of the lesion. Histopathological examination revealed features consistent with a primary ovarian leiomyoma. Microscopy showed haematoxylin and eosin stained interlacing bundles of fusiform spindle-shaped cells without cytologic atypia or mitotic activity with normal ovarian parenchyma (Fig 4). IHA demonstrated strong positivity for smooth muscle actin (SMA), confirming smooth muscle differentiation. This case highlights the diagnostic challenges posed by solid ovarian masses with increased vascularity and abnormal vascular morphology and establishing the final diagnosis.



Fig 1 .Ultrasound revealed a solid heterogeneous hypoechoic solid lesion in the right ovary.

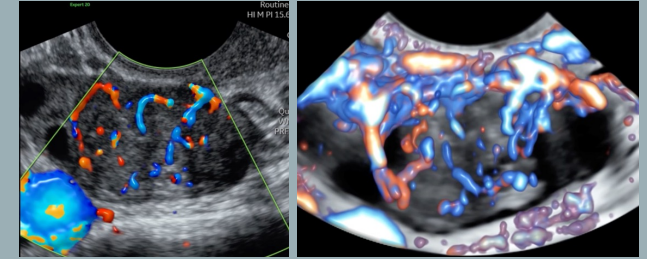


Fig 2 .Colour and HD Power Doppler showing increased peripheral and central vascularity with a colour score of 3–4 (a). 3D Power displaying abnormal vascular morphology (b).



Fig 3. Solid, firm mass lobulated margin (arrows) seen within the right ovary

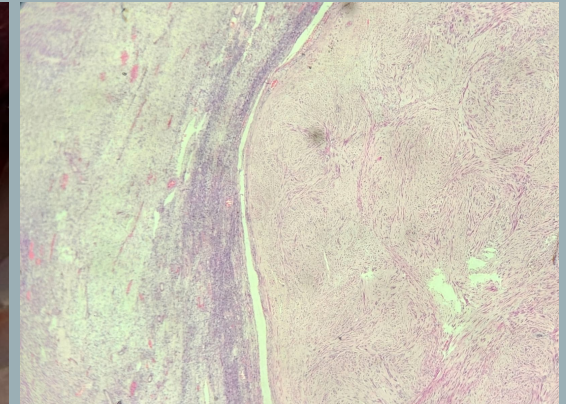


Fig4. H&E stained section showing circumscribed spindle cell tumour with normal ovarian parenchyma in the periphery.