



From Polycystic to Pathologic : Unmasking Sclerosing Stromal Tumour in a PCOD Presentation

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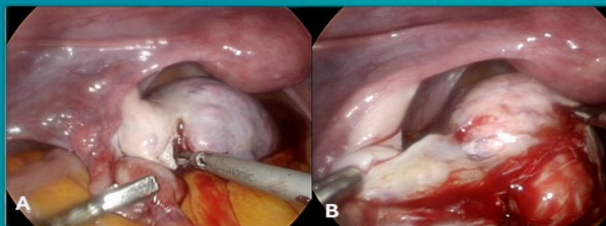


Introduction: Sclerosing Stromal Tumours (SST) are rare ovarian neoplasms comprising 2-6% of Ovarian Sex Cord-Stromal Tumours (OSCT). Arising from non-germ cell ovarian tissue, they may produce androgens or estrogens, causing menstrual irregularities and virilization.

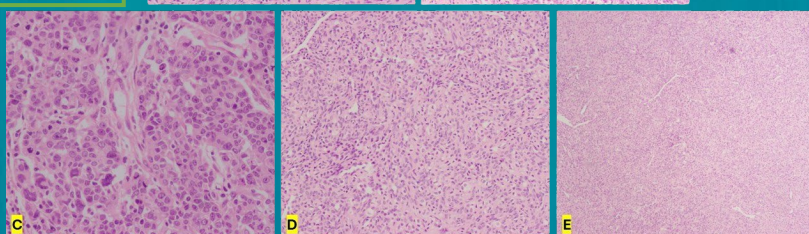
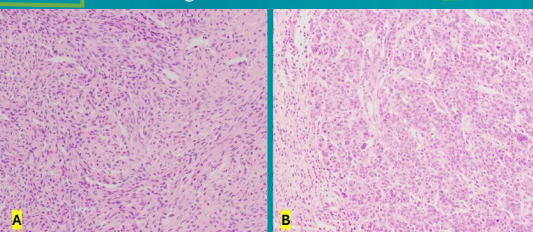
We present a case of SST initially misdiagnosed as PCOD due to overlapping clinical and radiological features.

Objectives: To highlight the diagnostic challenges of SST mimicking PCOD and emphasize the importance of thorough evaluation in young women with atypical PCOD features and abdominal pain.

Case Report: A 20-year-old girl presented with irregular cycles, weight gain (BMI: 29kg/m²), hirsutism, acne, and abdominal pain. Initial ultrasound revealed a bulky left ovary with a polycystic pattern, and elevated testosterone levels supported a diagnosis of PCOD. She returned with acute abdomen within a week. Ultrasound at our centre showed a left ovarian solid cystic lesion. Suspecting torsion, taken up for laparoscopy, which revealed a solid exophytic ovarian growth - was enucleated. Histopathology confirmed SST. Follow-up over one year, including ultrasounds at 3 and 6 months- no recurrence and regular menstruation.



A & B: Left ovarian exophytic solid cystic lesion and its excision, C: In-bag retrieval



A: Cellular and hypocellular areas of spindle cells with thin dilated blood vessels, B: Lobules of epitheloid cells having abundant cytoplasm and round nuclei, C: High power view of epitheloid cells having abundant cytoplasm and round nuclei with intervening blood vessels, D: Spindle cells in a sclerosing background, E: Thin, dilated and branching hemangiopericytoma like vasculature

Discussion: SSTs are rare, usually unilateral, benign tumours predominantly affecting women in their 2nd and 3rd decades. Originating from perifollicular myoid stromal cells, hormonally active SSTs may mimic PCOD, with overlapping symptoms like menstrual irregularities,

infertility, precocious puberty and virilization - causing diagnostic delays. Preoperative imaging is often inconclusive due to inconsistent appearances on USG. Histopathology typically shows a pseudolobular pattern with broad streaks of fibrous stroma separating tumour nodules (cellular and hypocellular areas). Conservative ovarian-preserving surgery is curative.

Conclusion: This case underscores the importance of vigilance in evaluating PCOD-like presentations with persistent or acute symptoms. SST, though rare, should be considered, and timely surgical intervention ensures excellent outcomes with ovarian preservation.

References and Acknowledgements: 1. Lucchetti MC et al. A rare ovarian tumor: Sclerosing stromal case series and literature review. *Pediatr Rep.* 2023;15(1):20. [PMCID: PMC9844338].
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