

Pedunculated Leiomyoma within an Ovarian Endometriotic Cyst

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Leiomyomas are benign, spindle cell tumours (SCT) of smooth muscle origin. They account for 0.5-1% of benign ovarian neoplasms. Most ovarian SCT are fibromas. Other ovarian SCT include fibrosarcomas, thecomas, granulosa, and sertoli-leydig cell tumours. A 52-year-old woman was presented with heavy menstrual bleeding and pallor. Her haemoglobin was 6.4g/dl. Previous endometrial and cervical biopsies were unremarkable. A cystic left ovary with a solid area was seen on ultrasound scan. A total abdominal hysterectomy with bilateral salphingo oophorectomy and omentectomy was done following optimisation of haemoglobin levels and specimen was sent for histopathology. Macroscopy revealed an enlarged, cystic left ovary. A pedunculated, mass with a tan, whorled cut surface was attached to the inner surface of the cyst. The rest of the cyst wall was smooth and brown coloured. Microscopy revealed an ovarian endometriotic cyst containing a benign pedunculated SCT. The spindle cells had cigar shaped nuclei and were arranged as interlacing fascicles. Immunohistochemistry revealed strong diffuse SMA and desmin positivity and very low Ki 67 values. A diagnosis of a pedunculated leiomyoma within an endometriotic cyst was made. Ovarian leiomyomas are rare, benign tumours of uncertain histogenesis. Possible origins include smooth muscle of hilar blood vessels, ovarian ligament, multipotential ovarian stromal cells, and undifferentiated germ cells. When associated with endometriosis, smooth muscle metaplasia of endometrial or ovarian stromal cells present in the endometriotic cyst are possibilities. This case reports an unusual presentation of a pedunculated leiomyoma within an ovarian endometriotic cyst. It also highlights that despite its rarity, leiomyomas should be considered in the differential diagnosis of ovarian SCT.

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