



Broad Ligament and Psoas Muscle Leiomyoma: A Case Report

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Background

Leiomyomas (fibroids) are common benign smooth muscle tumours arising from the uterus. Extrauterine leiomyomas (EULs) are rare, with an unclear aetiology, and can present a diagnostic challenge due to their unusual anatomical locations¹⁻³. Prior uterine myomectomy and/or morcellation procedures are an established risk factor for the development of EULs.⁴

Aims

Describe an unusual case of extrauterine fibroid arising from the broad ligament and psoas muscle with no established risk factors.

Case

CE, 48F admitted under General Surgery for removal of large intra-abdominal mass. CE had presented to her GP for loin/back pain and CT had demonstrated a large mass of unclear origin, thought to be most consistent with neuroendocrine or gastrointestinal stromal tumour. Tumour markers including CEA, AFP, CA 15.3, CA 19.9 and CA 125 all returned normal. She was otherwise well, with a history of asymptomatic uterine fibroids, T2DM and hypertension.

Results

The 4.95kg mass was traced into the pelvis and arose from the left broad ligament and psoas muscle, with no overt myometrial attachment to the uterus. The intra-operative findings were most consistent with a parasitic fibroid, with sarcoma as an important differential. The mass was removed via midline laparotomy with bilateral salpingectomy and hysterectomy. EUL was diagnosed on histopathology. CE is



CTKUB demonstrating large complex solid and cystic mass presumed to arise from left ovary. No evidence of ascites, peritoneal or mental modularity.



The 4.95kg mass was traced to the pelvis and appeared to be within the broad ligament but without any obvious attachment to the uterus or the ovary. There was an apparent pedicle to the mass within the right psoas muscle.

Discussion

This is an unusual case of very large EUL, most consistent with parasitic leiomyoma. In the absence of previous morcellation or other established risk factors, the pathophysiology remains unclear. A theory presented is that of a pedunculated subserosal fibroid outgrowing its vasculature, detaching from the serosa and implanting with a new blood supply.

References

1. Kho KA, Nezhat C. Parasitic myomas. *Obstet Gynecol* 2009;114:611–15. [PubMed] [Google Scholar]
2. Cucinella G, Granese R, Calagna G et al.. Parasitic myomas after laparoscopic surgery: an emerging complication in the use of morcellator? Description of four cases. *Fertil Steril* 2011;96:90–6. [PubMed] [Google Scholar]
3. Sinha R, Sundaram M, Lakhota S et al.. Parasitic myoma after morcellation. *J Gynecol Endosc Surg* 2009;1:113–15. [PMC free article] [PubMed] [Google Scholar]
4. Declas E, Lucot JP. Extra uterine leiomyomatosis: review of the literature. *Gynecol Obstet Fertil Senol.* 2019;47(7–8):582-590.