

A rare case of benign metastasising leiyomyoma



Dr Grace Pichlmann (MD), Dr Margaret Scanlon (MBBS, FRANZCOG, FRACGP, FACCRM, DRANZCOG Adv.)

Logan Hospital, Queensland

Introduction

Benign metastasising leiomyoma (BML) is rare condition characterised by the presence of histologically benign leiomyoma at extrauterine sites¹. This condition is unique in that mitotically inactive tumours metastasise to distant sites. The most frequent site of metastasis is the lungs, but other atypical sites include spinal cord and heart². This condition usually presents in women of reproductive age and most have a history of uterine leiomyoma surgery such as hysterectomy and myomectomy³. The disease has an indolent course with most patients being asymptomatic. However, extensive disease can produce symptoms such as chest pain, dyspnoea, and rarely may progress to respiratory failure.

Case Report

A 56 year old G3P0 presented to the Gynaecology outpatient department with a 12 month history of pelvic pain and dyspareunia. She had a history of laparoscopic assisted vaginal hysterectomy at age 38 for endometriosis, uterine fibroids and adenomyosis. Pelvic ultrasound demonstrated a 40mm simple left sided ovarian cyst. Tumour markers showed only a mildly elevated Ca 19.9 to 39.

The patient underwent diagnostic laparoscopy plus bilateral salpingo-oophorectomy. Intraoperatively, multiple small nodules and lesions were noted overlying the small and large bowel, omentum and pelvic side wall (see figures). Omental and peritoneal biopsies and washings were collected.

Histopathology confirmed the diagnosis of BML in samples from both ovaries, omental biopsy and peritoneal washings. Computer tomographic imaging demonstrated three small pulmonary nodules, all measuring 3mm, which were deemed non-specific.

The patient was referred to a tertiary gynaecologyoncology service where her case was reviewed and she was commenced on letrozole to suppress further dissemination and growth of the disease. No further surveillance or surgery was planned.



Figure 3. BML lesions identified on pelvic side wall

12(4), e0175875. https://doi.org/10.1371/journal.pone.0175875





Figures 1 &2. BML lesions identified on large bowel, small bowel and omentum

Conclusion & discussion

- BML is a rare and unique condition whereby benign tumours are found to metastasize to distant sites
- This case is atypical as nodules were identified in the pelvic cavity only, with sparing of the lungs
- This disease has an indolent course and is usually asymptomatic – however disease may become extensive if the diagnosis is missed
- Currently there is no standardised guidelines to base treatment for BML
- Management is individualised to each case, based on location and extent of disease – may include a combination of surgery and/or hormonal suppression

References

- 1. Stewart, E., Laughlin-Tommaso, S., Schoolmeester, J.K. (2022) Uterine fibroids (leiomyomas): Variants and smooth muscle tumors of uncertain malignant potential. Up to Date: https://www.uptodate.com/contents/uterine-fibroids-leiomyomas-variants-and-smooth-muscle-tumors-of-uncertain-malignant-potential?search=benign%20metasisising%20leiomyoma&source=search_result&selectedTitle=1~150&usage_type=default&display_rank=1#H9293634%20%20https:%2F%2Fwww.ncbi.nlm.nih.gov%2Fpmc%2Farticles%2FPMC539
- 8563%2F
 2. Barnaś, E., Książek, M., Raś, R., Skręt, A., Skręt-Magierło, J., & Dmoch-Gajzlerska, E. (2017). Benign metastasizing leiomyoma: A review of current literature in respect to the time and type of previous gynecological surgery. PloS one,
- Li, Y., Xu, T., Wang, M., Jiang, L., Liu, Q., & Liu, K. (2022). Concurrent Benign Metastasizing Leiomyoma in the Abdominal Wall and Pelvic Cavity: A Case Report and Review of the Literature. Frontiers in surgery, 9, 842707. https://doi.org/10.3389/fsurg.2022.842707