OPEN ACCESS

¹Gynecology, Hospital Israelita Albert Einstein, Sao Paulo, Brazil
²Gynecologic Oncology, Hospital Israelita Albert Einstein, Sao Paulo, Brazil
³Coordinator, Hospital Israelita Albert Einstein, Sao Paulo, Brazil

Correspondence to

Debora Davalos Albuquerque Maranhao, Gynecology, Hospital Israelita Albert Einstein, 05652 Sao Paulo, Brazil; davalosde@yahoo.com.br

Accepted 6 July 2021
 Published Online First
 29 July 2021

© IGCS and ESGO 2021. Re-use permitted under CC BY-NC. No commercial re-use. Published by BMJ.

To cite: Barbosa GB, Maranhao DDA, Alvarenga Bezerra V, *et al.* *Int J Gynecol Cancer* 2021;**31**:1303–1304.

Laparoscopic approach to paravaginal low-grade sarcoma

Guilherme Bicudo Barbosa,^{1,2} Debora Davalos Albuquerque Maranhao ¹,
 Vanessa Alvarenga Bezerra,^{1,2} Aley Talans,¹ Eduardo Zlotnik,^{1,3} Renato Moretti-Marques^{1,2}

Retroperitoneal sarcoma is a rare malignancy arising from mesenchymal cells.¹ Surgical resection with wide negative margins remains the cornerstone of treatment as it decreases the risk of recurrence.² The proximity to critical abdominal structures makes a total resection with nerve and vascular preservation a challenge.³ The case described concerns a 33-year-old nulliparous patient with severe sciatic pain radiating into the genital and gluteal regions and urethral obstruction due to a paravaginal mass bulging into the mucosa and attached to the pelvic floor. Pelvic magnetic resonance imaging (MRI) showed a well-defined solid formation measuring 6.7×5.5×5.2 cm between the bladder and the rectum, extending to the lateral vaginal wall. A biopsy showed a mesenchymal neoplasm originating in the soft muscle tissue with atypical nuclei.

Anatomical and functional damage is a concern for fertility and nerve sparing surgery, so we developed the following strategy to approach the mass:⁴ (1) surgical team positioning and trocar placement; (2) bladder and right ureter mobilization: the dissection and mobilization were performed to avoid

Figure 1 Nerve preservation dissection to access the para-vaginal sarcoma.

post-operative complications; (3) prophylactic control of bleeding by vascular dissection: temporary vessel ligation; (4) somatic and autonomic nerve exposure: recognition and dissection of the route of the sacral nerve were undertaken because of the patient's symptoms; (5) mass resection: a laparoscopic resection for surgery-free margins and complete mass

Video 1 Laparoscopic approach to paravaginal low-grade sarcoma

@IJGOnline

Copyright © 2021 BMJ Publishing Group Ltd, International Gynecological Cancer Society, & European Society of Gynecological Oncology. All rights reserved.

Figure 2 Dissected pelvic mass and its anatomical relationships with the ureter and the pelvic floor.

mobilization that allowed the procedure to be finished vaginally. The surgery lasted 5 hours.

Pathological analysis showed a conventional soft tissue leiomyosarcoma, histological grade G1, 6.9 cm, with free surgical margins. The patient experienced a significant improvement in the pain and was discharged from hospital on the second day after surgery with no need for opioids or blood transfusion and no signs of recurrence of disease in the latest MRI scan at 1-year follow-up.

We conclude that it is possible to perform a successful retroperitoneal approach to soft tissue sarcoma on the pelvic floor, aimed at nerve preservation, vascular control, and fertility preservation.

Contributors GBB: video creator and edition; DDAM: narration, abstract and submission; VAB: final submission edition; AT: images edition; EZ: organizational support; RM-M: anatomy review, main surgeon, edition review, video coordination.

Funding The authors have not declared a specific grant for this research from any funding agency in the public, commercial or not-for-profit sectors.

Competing interests None declared.

Patient consent for publication Obtained.

Ethics approval The study was approved by the appropriate Institutional Review Board - Comitê de ética em pesquisa com seres humanos do Hospital Israelita Albert Einstein number CAAAE: 40495920.9.0000.0071 and written informed consent was obtained from all subjects.

Provenance and peer review Not commissioned; externally peer reviewed.

Data availability statement All data relevant to the study are included in the article or uploaded as supplementary information

Open access This is an open access article distributed in accordance with the Creative Commons Attribution Non Commercial (CC BY-NC 4.0) license, which permits others to distribute, remix, adapt, build upon this work non-commercially, and license their derivative works on different terms, provided the original work is properly cited, an indication of whether changes were made, and the use is non-commercial. See: <http://creativecommons.org/licenses/by-nc/4.0/>.

ORCID iD

Debora Davalos Albuquerque Maranhao <http://orcid.org/0000-0002-9452-6147>

REFERENCES

- 1 Gounder M, Ravi V, Yamada Y. Sarcoma of soft tissue. In: *Oncology in practice: clinical management*. American Cancer Society, 2018: 631–43.
- 2 Mantas D, Garmpis N, Polychroni D. Retroperitoneal sarcomas: from diagnosis to treatment. Case series and review of the literature. *G Chir* 2020;41:18–33.
- 3 Guven ESG, Guven S, Esin S, *et al*. Recurrent extraperitoneal low grade leiomyosarcoma with unusual localization. *Eur J Gynaecol Oncol* 2004;25:381–3.
- 4 Lemos N, Cancelliere L, Li ALK, *et al*. Superior gluteal vein syndrome: an intrapelvic cause of sciatica. *J Hip Preserv Surg* 2019;6:104–8.