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# RETROPERITONEAL LEIOMYOSARCOMA IN A PATIENT WITH BENIGN METASTATIC LEIOMYOMATOSIS: A CASE REPORT

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## **CASE PRESENTATION**

A 70-year-old female patient, investigating flu-like symptoms during the COVID-19 pandemic, underwent a chest CT scan which showed neoplastic pulmonary nodules. After a biopsy, the histopathology suggested benign metastatic leiomyomatosis, and she remained under outpatient follow-up without specific treatment. It is worth mentioning her previous history of hysterectomy for uterine leiomyoma 18 years earlier. Subsequently, she presented with nonspecific abdominal symptoms, and an abdominal CT scan was indicated, which revealed a 9.0 x 8.4cm nodular retroperitoneal expansive formation, with a proposal for total surgical resection. During surgery, the lesion was in close contact with the aorta and the left psoas muscle, and the histopathological and immunohistochemical report revealed a lowgrade leiomyosarcoma.

### **DISCUSSION**

Benign metastasizing leiomyomatosis is a rare, well-differentiated and hormone-dependent pathology. It has a mesenchymal lineage with smooth muscle tissue implants in extra-uterine sites, the lung being the most common. Its etiology is unknown, with a higher prevalence in the peri- or premenopausal period, in women with a surgical history of fibroid resection.

After the diagnosis of the retroperitoneal mass, it was believed to be the same disease in an atypical topography, but the biopsy showed a low-grade leiomyosarcoma. Some studies have suggested that this disease could be a low-grade sarcoma, due to its metastatic characteristics. However, low-

grade leiomyosarcomas do not usually show distant metastasis, as was observed in benign metastatic leiomyomatosis.

Retroperitoneal tumors can grow considerably before clinical manifestations, with liposarcomas and leiomyosarcomas being the most common topographically. Total resection of the lesion is the therapy of choice.



Retroperitoneal mass with a solid cystic appearance measuring around 8 cm

### **FINAL COMMENTS**

In this case, due to the previous diagnosis of benign metastatic leiomyomatosis, the possibility of the retroperitoneal lesion being a new focus in an anomalous location was considered. However, due to the characteristics presented in the imaging exam, it was not possible to rule out retroperitoneal sarcoma, and complete resection was chosen. As these are rare diseases, there is a need for studies to correlate the appearance of low-grade sarcomas in patients with benign metastatic leiomyomatosis or whether they constitute the same pathology with different presentations.

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