

# Metastatic meningioma: a rare cause of mediastinal lymphadenopathy.

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## DESCRIPTION

A 69-year-old man with known, stable atypical meningioma of the brain diagnosed 5 years previously presented with severe shortness of breath. The patient had previously been treated with surgery and radiotherapy to the brain. Chest X-ray revealed bulky mediastinal lymphadenopathy (figure 1). CT (figure 2) confirmed mediastinal and upper abdominal lymphadenopathy in addition to multiple pulmonary emboli. The patient underwent an endoscopic ultrasound and fine-needle aspiration (EUS-FNA), an established technique that enables prompt cytological sampling and assessment.<sup>1</sup>

The EUS-FNA preparations showed sheets and clusters of bland, polygonal epithelioid cells (figure 3). These demonstrated strong immunohistochemical positivity (figure 4) for epithelial membrane antigen. The final immunopanel was strongly supportive of metastatic meningioma.

Meningiomas are common intracranial tumours, classified by WHO into three grades based on mitotic activity and tumour differentiation.<sup>2</sup> Atypical (grade 2) and anaplastic (grade 3) meningiomas account for less than 5% of all meningiomas, and metastases from these lesions are rare (0.1%).<sup>3</sup>

Due to the small number of patients with a diagnosis of metastatic meningioma, there are no established treatment pathways and the prognosis is unknown.<sup>3</sup>

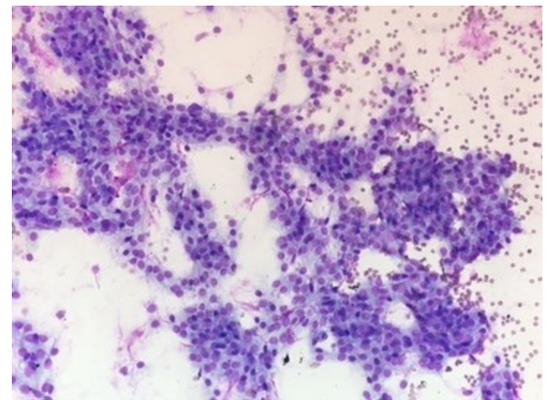
The patient in our case report completed radiotherapy to the mediastinum at a dose of 30 Gy



**Figure 1** Chest X-ray.

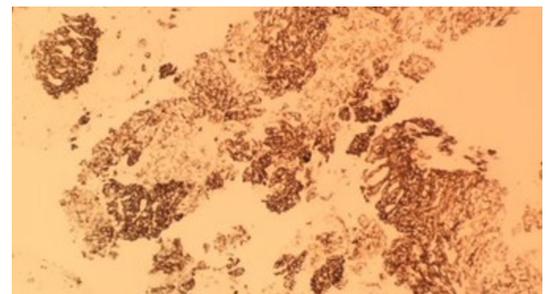


**Figure 2** Contrast-enhanced CT image showing adenopathy at the level of the aortic arch.



**Figure 3** Endoscopic ultrasound and fine-needle aspiration cytology preparation with Giemsa stain showing bland sheets and clusters of polygonal meningioma cells.

in 10 fractions over 10 days, which improved his respiratory symptoms alongside a reducing dose of steroids. Following clinic discussion, he declined systemic treatment options and opted for palliative care.



**Figure 4** Immunohistochemical stain showing diffuse tumour cell positivity for epithelial membrane antigen.



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## Images in...

To the best of our knowledge, this is the first case in the literature of metastatic meningioma diagnosed through EUS-FNA.

### Learning points

- ▶ Extracranial metastases from atypical meningioma are rare.
- ▶ Evidence-based treatment options are limited.
- ▶ Endoscopic ultrasound and fine-needle aspiration can enable prompt cytological diagnosis of enlarged lymph nodes and lesions from a variety of locations in the thorax and abdomen.

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**Competing interests** None declared.

**Patient consent** Obtained.

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