

CASE IMAGE

Extracerebral anaplastic meningioma

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Key Clinical Message

Conventional treatments of anaplastic meningioma include surgery and radiotherapy. Temozolomide is also an option. Metastases to extracerebral organs are very rare and hardly manageable. Antiangiogenic drugs could represent a salvage therapy.

Abstract

Anaplastic meningioma is an unusual tumor subtype that rarely involves organs outside the brain. In our case, a patient with cerebral meningioma developed lung metastases after 19 years from the initial tumor appearance. This unpredictable behavior could make complex the diagnosis.

KEYWORDS

antiangiogenic bevacizumab, extracerebral meningioma, lung metastases, temozolomide

1 | CASE REPORT

A 69-year-old man with a history of relapsing encephalic meningioma treated from 1994 to 2008 with three surgical interventions and brain radiotherapy underwent a left hemicolectomy in June 2015 for colon carcinoma with AJCC staging pT3 N2 (5 of 23 positive nodes). Tumor markers were negative, but basal CT scan showed a suspected metastatic nodule in the left lower lung lobe. Hence, chemobiotherapy with FOLFIRI and panitumumab was administered for 6 months, yielding stable disease. A complete resection of the known lung nodule was performed in June 2016 and allowed to diagnose a rare form of extracerebral rhabdoid meningioma of grade 3 as WHO classification. Careful monitoring was prescribed considering the previous treatments. In

December 2019, patient reported severe pain in the left chest wall. Therefore, PET and CT scan were performed and revealed two active nodules beside the fourth and seventh ribs ([Figure 1](#)). Histological and immunohistochemical (H&E, EMA, and Ki67 staining) diagnosis of thoracic anaplastic meningioma was confirmed by a new biopsy ([Figure 2](#)). Patient was treated with VMAT radiotherapy in both nodules and oral chemotherapy with temozolomide, but he experienced a rapid and impressive intrathoracic disease progression (CT scan in [Figure 3](#)). An empiric second-line antiangiogenic therapy with intravenous bevacizumab¹⁻³ at 10 mg/kg every 2 weeks led to stable disease lasting 19 months, until the lung mass caused pressure against the left cardiac ventricle, ejection fraction decrease, and final heart failure.

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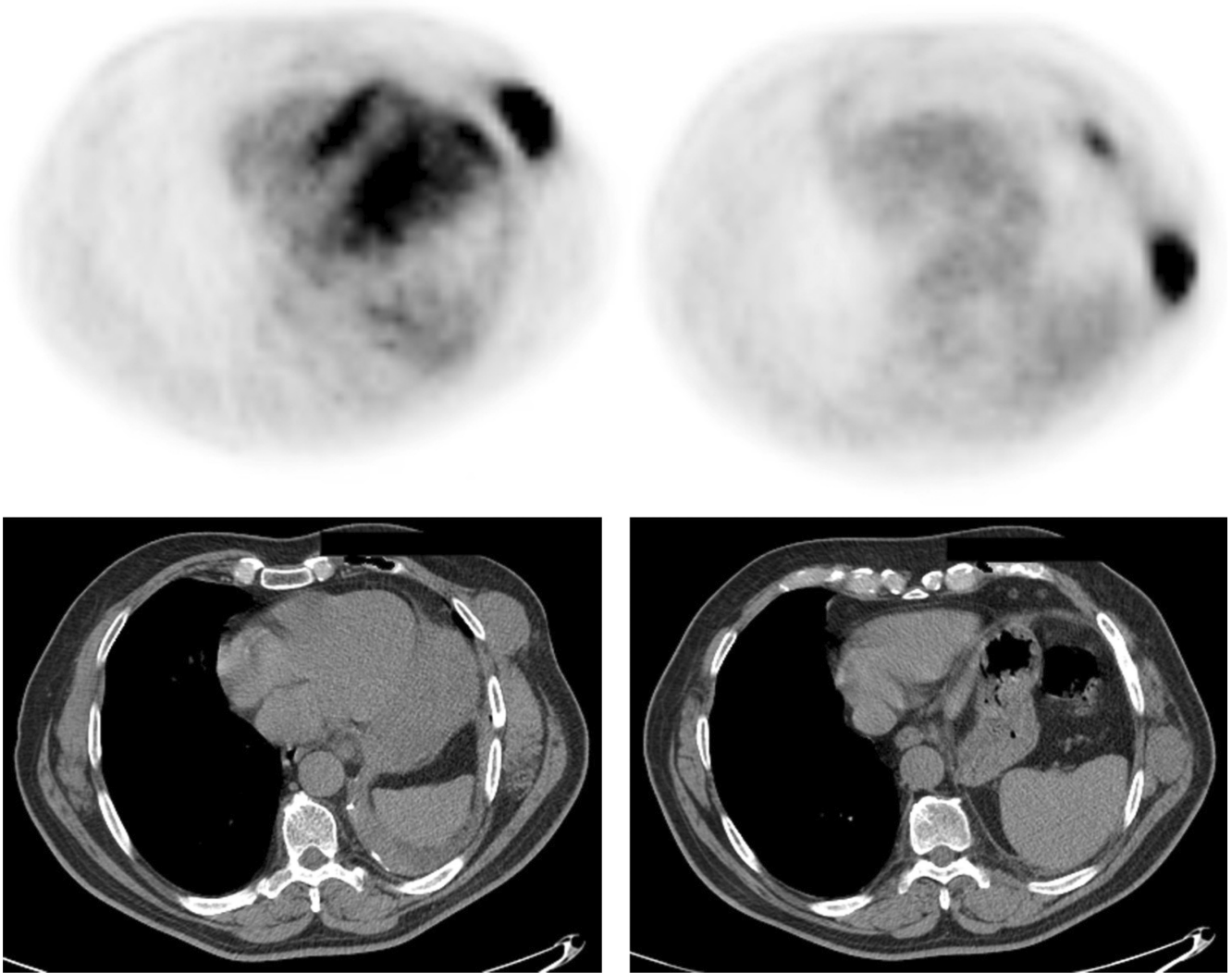


FIGURE 1 PET/CT scan of thoracic nodules.

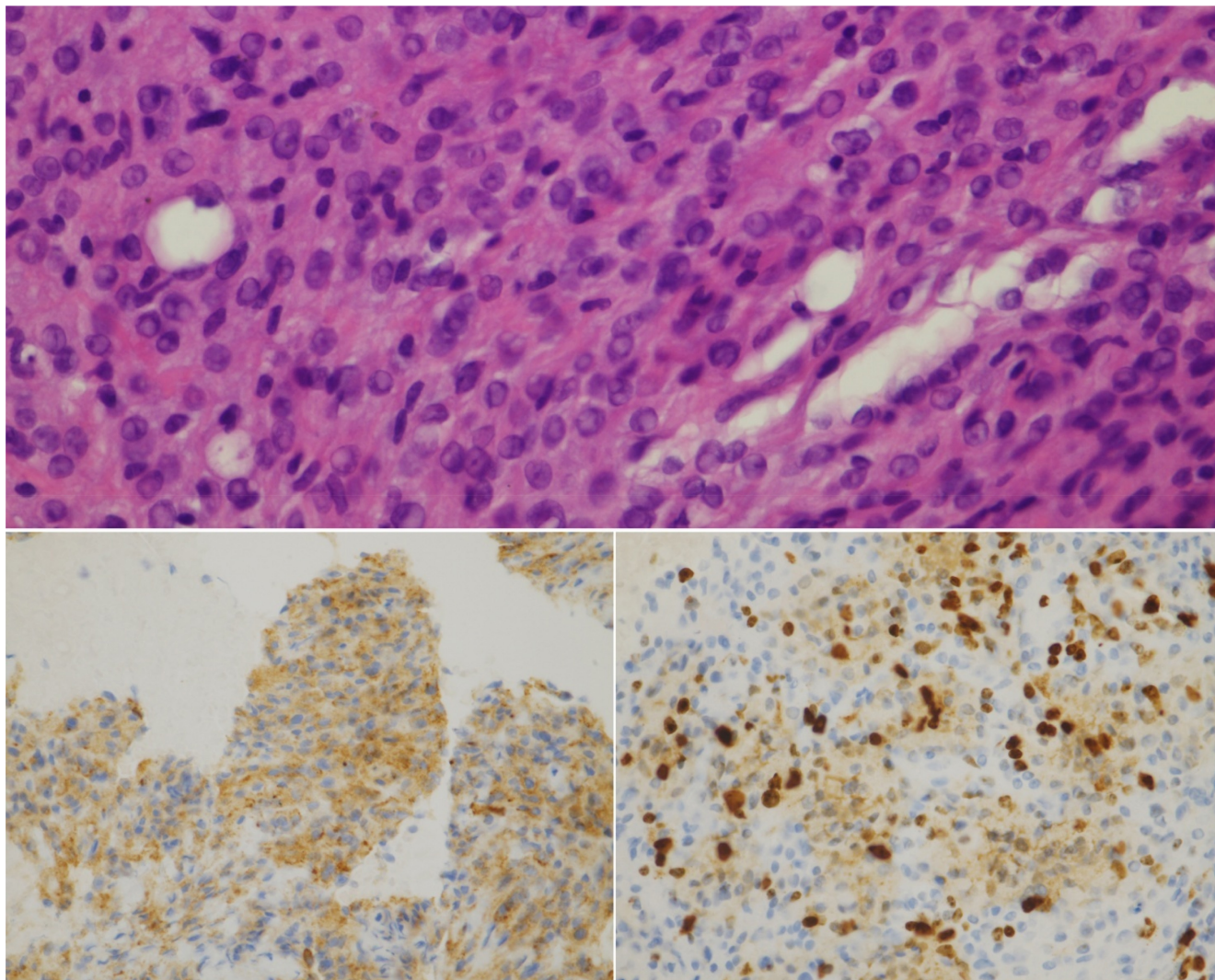


FIGURE 2 Immunohistochemical staining of anaplastic meningioma.



FIGURE 3 Bulky thoracic metastasis of anaplastic meningioma.

AUTHOR CONTRIBUTIONS

Guido Carillio: Writing – original draft; writing – review and editing. **Anna Maria Lavecchia:** Visualization. **Demetrio Misuraca:** Visualization.

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None.

CONFLICT OF INTEREST STATEMENT

The authors declare no conflict of interest.

DATA AVAILABILITY STATEMENT

Data available on request from the authors.

CONSENT

Written informed consent was obtained from the patient to publish this report in accordance with the journal's patient consent policy.

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