

Atypical meningioma case reports

A 68-year-old lady with a history of multiple craniotomies and hemifacial resections for meningothelial meningioma currently underwent orbital exenteration, tumor debulking and cervical nodal excision for tumor recurrence. Histopathological examination of the tumor showed atypical meningioma, with cervical nodal metastasis.

Discussion: This case report presents a rare finding of lymph node metastasis associated with atypical meningioma. The previous history of surgical resection is a known risk factor for metastasis for low to intermediate grade meningioma. Tumor biology and histology are predictors of metastasis. Hematogenous dissemination is the commonest route of metastasis. No standardized management protocol has been developed and the prognosis remains unknown ¹⁾.

A 48-year-old man diagnosed with [parasagittal atypical meningioma](#) (AM) involving biparietal bones with intracranial and extracranial extension up to galea aponeurotica of the scalp. The patient underwent Simpson's grade 2 resection (GTR (gross total tumour resection) with coagulation of dural attachment). Currently, [Atypical Meningioma Radiotherapy](#) is controversial after GTR. Here, through this case, we have discussed in detail issues related to tumour origin, that is, primary versus secondary extradural meningioma and controversial topics regarding the role of adjuvant radiotherapy in the management of AMs. We have presented our radiation treatment strategy addressing the high-risk zones related to tumour extension in this case ²⁾.

A 41-year-old man with a [medical history](#) of surgically resected intracranial [atypical meningioma](#). Nine years after diagnosis of atypical meningioma, a CT scan of the [chest](#) disclosed 10 pleural implants gathered in the fissure, in the paramediastinal pleura, and at the base of the left hemithorax. Surgical resection was decided. Parietal and mediastinal pleura resection with visceral pleural lesions removal were performed. Cyto-reductive surgery was associated with intrathoracic hyperthermic chemotherapy. Postoperative course was uneventful and no adjuvant therapy was undertaken. The patient is free of pleural recurrence 12 months post-operatively. The present case report suggests that cyto-reductive surgery with intrathoracic hyperthermic chemotherapy is feasible and safe in pleural metastasis from meningioma. Prolonged follow-up and prospective studies are mandatory to assess its oncological benefit ³⁾.

A 62-year-old man with an atypical grade II [meningioma](#), invading bone and scalp, and present a step-by-step video description of a modified technique for cranioplasty and scalp reconstruction with latissimus dorsi flap. By using this technique, they aimed to minimize the space between the dura and the flap, which would decrease the risk of fluid collections and infections ⁴⁾.

A 55-year old man with a history of meningioma treated with [LHRH](#)-agonist plus radiotherapy for [prostate cancer](#) (PCa) experienced a [meningioma](#) growth during hormone therapy (HT). Meningioma was radically resected revealing an atypical meningioma and HT was continued due to the high risk of PCa relapse until symptomatic meningioma relapse occurred after further 10 months. Gross lesions

were radically removed and histology revealed anaplastic meningioma. This is the first case of rapid meningioma evolution to an anaplastic histology during LHRH-agonist ⁵⁾.

A 69-year-old man presented with an atypical [meningioma scalp metastases](#). Six years after the right frontoparietal meningioma lesion was completely resected, an isolated subcutaneous metastasis developed at the right frontal region of the scalp, originating at the scar left by the first surgery. Postoperative histological examination of the subcutaneous tumor revealed the features of an [atypical meningioma](#).

This study highlights that resection of meningiomas is still associated with a risk of iatrogenic metastasis. Surgeons should carefully wash out the [operative field](#) and change surgical tools frequently to avoid the potential risk of metastasis ⁶⁾.

Only two prior cases of benign dendritic melanocytes colonizing a meningioma have been reported.

Dehghan Harati et al. add a third case, describe clinicopathologic features shared by the three, and elucidate the risk factors for this very rare phenomenon. A 29 year-old Hispanic woman presented with headache and hydrocephalus. MRI showed a lobulated enhancing pineal region mass measuring 41 mm in greatest dimension. Subtotal resection of the mass demonstrated an atypical meningioma, WHO grade II, and the patient subsequently underwent radiotherapy. She presented 4 years later with diplopia, and MRI showed an enhancing extra-axial mass measuring 47 mm in greatest dimension and centered on the tentorial incisura. Subtotal resection showed a brain-invasive atypical meningioma with melanocytic colonization. The previous two cases in the literature were atypical meningiomas, one of which was also brain invasive. Atypical meningiomas may be at particular risk for melanocytic colonization as they upregulate molecules known to be chemoattractants for melanocytes. We detected c-Kit expression in a minority of the melanocytes as well as stem cell factor and basic fibroblast growth factor in the meningioma cells, suggesting that mechanisms implicated in normal melanocyte migration may be involved. In some cases, brain invasion with disruption of the leptomeningeal barrier may also facilitate migration from the subarachnoid space into the tumor. Whether there is low-level proliferation of the dendritic melanocytes is unclear. Given that all three patients were non-Caucasian, meningiomas in persons and/or brain regions with increased dendritic melanocytes may predispose to colonization. The age range spanned from 6 years old to 70 years old. All three patients were female. The role of gender and estrogen in the pathogenesis of this entity remains to be clarified. Whether melanocytic colonization may also occur in the more common Grade I meningiomas awaits identification of additional cases ⁷⁾.

1)

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