Double vision: double trouble

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DESCRIPTION

A 43-year-old smoker presented with painless binocular diplopia and numbness in the left fronto-temporal region of 4 weeks duration. Physical examination revealed non-tender bony swelling in the left zygomaticotemporal region with posterior cervical lymphadenopathy and non-tender hepatomegaly (figure 1A, white arrow). Neurological examination revealed left superior oblique and lateral rectus palsy with sensory loss in the ophthalmic division of the left trigeminal nerve. A clinical diagnosis of left cavernous sinus syndrome was made. Gadolinium-enhanced MRI of the brain showed enhancing soft tissue mass in the left zygomaticotemporal region infiltrating the left cavernous sinus (figure 1B, arrowhead) and lateral rectus muscle (figure 1B, arrow). Contrast-enhanced CT of the chest and abdomen

revealed a lesion in the middle lobe of the right lung suggestive of bronchogenic carcinoma (figure 1C) with mediastinal lymphadenopathy, and adrenal and liver metastases. Biopsy of the posterior cervical node revealed features suggestive of metastatic small cell carcinoma. Palliative chemoradiotherapy was initiated in view of an underlying diagnosis of stage IV small cell lung carcinoma. Metastases constitute the most common malignant tumour of the eyes in males, with the primary source being the lungs in the majority of cases.¹ Orbital metastasis as the initial presentation of small cell lung carcinoma has been reported previously in the literature.^{2 3} On the other hand, small cell lung carcinoma presenting with concomitant extracranial (temporal bone, lateral rectus muscle) and intracranial (cavernous sinus) involvement is extremely uncommon.

Figure 1 (A) Clinical photograph showing non-tender bony swelling in the left zygomaticotemporal region (arrow) with left superior oblique and lateral rectus palsy. (B) Cranial Gad MRI showing enhancing soft tissue mass in the left zygomaticotemporal region infiltrating the left cavernous sinus (arrowhead) and lateral rectus muscle (arrow). (C) CT of the chest revealing a homogenous lesion in the middle lobe of the right lung suggestive of bronchogenic carcinoma (arrow).

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Learning points

- ▶ Metastases constitute the most common ocular malignancy.
- ▶ Small cell lung carcinoma is notorious for extrapulmonary manifestations.
- ▶ Concomitant intracranial and extracranial ocular pathology is most often secondary to infiltrative aetiopathogenesis.

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Competing interests None.

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