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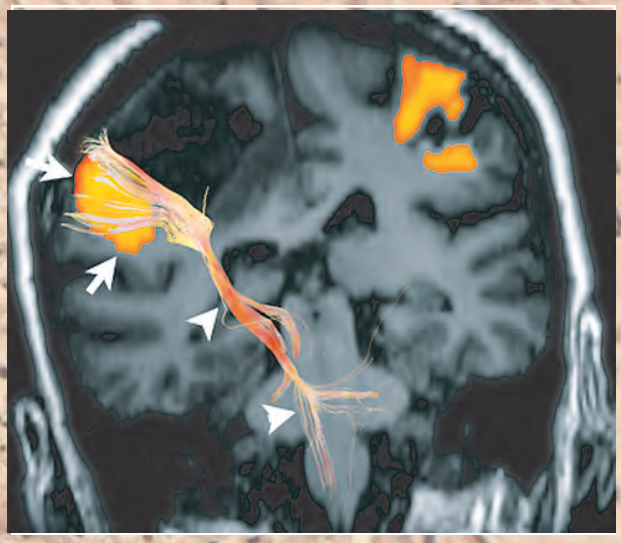

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An Exophytic Brainstem Lesion

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Case Study

A 45-year-old man was admitted to our hospital for progressive dysphagia and gait disturbance. The patient had no other medical history. Clinical examination showed IX-X-XI cranial nerve palsies and left pyramidal syndrome. MRI demonstrated an exophytic contrast-enhancing lesion in the medulla oblongata (Figure 1).

What Is Your Diagnosis?

Discussion

Partial surgical removal of the mass lesion was performed. The pathological diagnosis was a pilocytic astrocytoma (WHO grade I). Clinical symptoms progressively improved. Since the residual tumour progressed in the follow-up, carboplatine chemotherapy and focal radiotherapy were proposed. Four years later, the patient was still considered in remission.

Exophytic contrast-enhancing gliomas, which are well-known in children (up to 10 % of cases) and are associated with good prognoses, are extremely rare in adults, perhaps because most exophytic gliomas are pilocytic astrocytomas, which are rare tumour types in adults [1]. In adults, great caution is needed to attribute an exophytic contrast-enhancing brainstem mass to this type of benign lesion because malignant gliomas and other non-tumoural diseases may have a similar radiographic appearance, underlining the importance of histological confirmation [1, 2]. Surgical resection is recommended in some cases, including dorsal exophytic tumours protruding into the fourth ventricle. Improvement in neurosurgical techniques (particularly the use of intraoperative ultrasound, intraoperative neurophysiological mapping, and computer reconstruction techniques) has facilitated partial resection of tumours previously considered inoperable, or even gross total removal in some cases, without affecting the functional status.

Figure 1. Brain MRI (T1-weighted/gadolinium) showing a contrast-enhanced lesion in the medulla oblongata. The tumour has dorsal exophytic and cystic components.

References:

1. Reyes-Botero G, Mokhtari K, Martin-Duverneuil N. Adult brainstem gliomas. Oncologist 2012; 17: 388–97.

2. Dellaretti M, Touzet G, Reyns N, et al. Correlation between magnetic resonance imaging findings and histological diagnosis of intrinsic brainstem lesions in adults. Neurooncol 2012; 14: 381–5.

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