Pilocytic astrocytoma

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Accepted 15 March 2016

DESCRIPTION

Pilocytic astrocytoma (PA) is a benign tumour of childhood, often located in deep midline structures such as the brainstem and the cerebellum.[1] Gross surgical resection is curative in the majority of patients.[2] We report a case of recurrent PA diagnosed after an acute confusional state and right-sided spastic hemiparesis in a previously healthy 38-year-old woman. Her initial brain CT showed a left temporal mass causing obstructive hydrocephalus (figure 1A–C). Acute surgical extraction was performed (figure 1D) and the biopsy confirmed the diagnosis of PA grade I (WHO). The patient remained clinically asymptomatic for 1 year, when a progressive headache emerged. At this time, the neurological examination disclosed the presence of dysarthria and right-sided hemiparesis with facial involvement. Brain MRI showed the presence of recurrent PA (figure 1E, F). The patient again underwent surgery due to the mass effect and brainstem compression caused by the tumour, and the diagnosis of PA was reconfirmed histologically. The patient fully recovered after the intervention. PA occurs commonly in the first 2 decades of life.[1] Information on the characteristics of PA in adulthood is scarce due to its rarity. Some studies indicate the adult prognosis to be similar to that in children, while others indicate that PA may show aggressive behaviour with tumour recurrence and death.[2] Anaplastic features are associated with worse prognosis, but little is known about the value of genetic characterisation in adulthood PA.[3] In conclusion, this case offers a unique description of adult onset PA in an atypical location outside the midline structures, and also provides an example of early recurrence.

Learning points

- Pilocytic astrocytoma is considered a form of circumscribed astrocytoma of childhood, but little is known about its behaviour in adult patients due to its rarity.
- Presenting symptoms due to increased intracranial pressure resulting from mass effect or hydrocephalus and surgical resection are generally considered as curative.
- In adult patients, such as the woman in this case, pilocytic astrocytoma can present aggressive behaviour with atypical location and early recurrence.

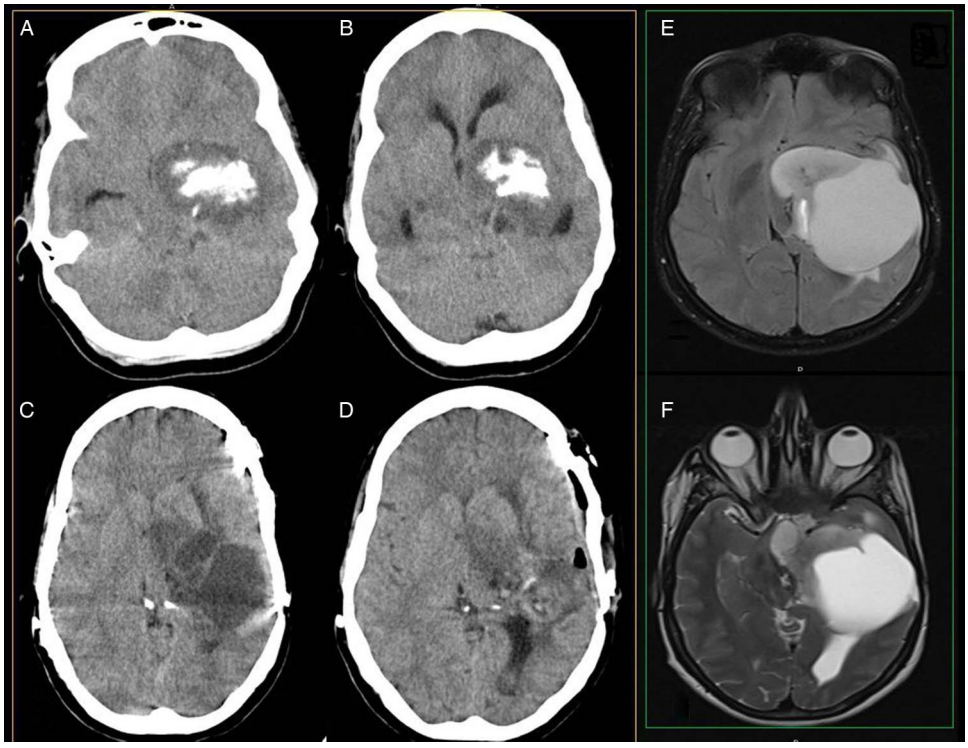

Figure 1 (A–C) Left calcified temporal mass with involvement of the thalamus and medial aspect of the left temporal lobe. (D) Cranial CT scan after first surgery. (E and F) MRI with gadolinium before second surgery: voluminous 6.5 cm mass in the left fronto temporal lobe, with cystic appearance.

To cite: Lourenço EP, Nzwalo H, Sampaio MR, *et al*. *BMJ Case Rep* Published online: [*please include* Day Month Year] doi:10.1136/bcr-2015-213013

Competing interests None declared.

Patient consent Obtained.

Provenance and peer review Not commissioned; externally peer reviewed.

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