Rupture of megadolicho basilar artery anomaly

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DESCRIPTION

Enlargement and ectasia of the basilar artery as a consequence of fusiform aneurysm is described as megadolicho basilar artery (MBA) anomaly. MBA can cause ischaemic events of the posterior circulation or compression of the adjacent nerves; or, rarely, subarachnoid haemorrhage (SAH). Non-invasive diagnostic tests for delineating MBA include three-dimensional CT angiography and MR angiography.^{1 2}

We report a case of a 70-year-old woman who presented with sudden onset of dysarthria and mild left hemiparesis. Head CT scan showed a markedly tortuous and dilated basilar artery without haemorrhage (figure 1A).

Diffusion-weighted MRI at this point revealed a high-intensity area at right pons, indicating a small area of infarction (figure 1B). MR angiography revealed a basilar artery extending 20 mm beyond the dorsum sellae, where a saccular and fusiform aneurysm was observed (figure 1C).

Three hours after arrival in hospital, and during insertion of a nasogastric tube, the patient became comatose. An additional plain head CT scan revealed massive SAH, especially in the basal, prepontine and insular cisterns (figure 2). The imaging appearance of SAH suggested that it was caused by the rupture of the MBA. The patient's condition deteriorated rapidly and she died a few hours later.

Learning points

- ▶ MR angiography can show megadolicho basilar artery (MBA) anomaly.
- ▶ MBA anomaly can lead to impairment of the cranial nerves, cerebral ischaemia and haemorrhage.
- ▶ Placement of a nasogastric tube in patients with MBA anomaly may trigger its rupture.

Figure 2 Head CT scan showing massive subarachnoid haemorrhage.

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Competing interests None.

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Figure 1 (A) Non-contrast head CT scan showing markedly dilated and tortuous basilar artery. (B) Diffusion-weighted MRI revealing high-intensity lesion at right pons. (C) Reconstruction three-dimensional image of MR angiography showing megadolicho basilar artery anomaly.

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