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, pre-pontine 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.

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References
