- 7 **Sabel BA**, Kenkel S, Kasten E. Vision restoration therapy (VRT) efficacy as assessed by comparative perimetric analysis and subjective questionnaires. *Restor Neurol Neurosci* 2004;**22**:399–420.
- 8 **Kasten E**, Sabel BA. Visual field enlargement after computer training in brain-damaged patients with homonymous deficits. *Restor Neurol Neurosci* 1995;**8**:113–27.
- 9 **Nelles G**, Esser J, Eckstein A, et al. Compensatory visual field training for patients with hemianopia after stroke. *Neurosci Lett* 2001;**306**:189–92.
- 10 **Pambakian AL**, Mannan SK, Hodgson TL, et al. Saccadic visual search training: a treatment for patients with homonymous hemianopia. *J Neural Neurosurg Psychiatry* 2004;**75**:1443–8.
- 11 **Kerkhoff G**, Munssinger U, Haaf E, et al. Rehabilitation of homonymous scotomata in patients with postgeniculate damage of the visual system: Saccadic compensation training. *Restor Neurol Neurosci* 1992;**4**:245–54.
- 12 **Balliet R**, Blood KM, Bach-y-Rita P. Visual field rehabilitation in the cortically blind? *J Neural Neurosurg Psychiatry* 1985;**48**:1113–24.
- 13 **Reinhard J**, Schreiber A, Schiefer U, et al. Does visual restitution training change absolute homonymous visual field defects? A fundus controlled study. *Br J Ophthalmol* 2005;**89**:30–5.
- 14 **Sabel BA**, Trauzettel-Klosinski S. Improving vision in a patient with homonymous hemianopia. *J Neuro-Ophthalmol* 2005;**25**:143–9.
- 15 **Kerkhoff G**, Munssinger U, Eberle-Strauss G, et al. Rehabilitation of hemianopic alexia in patients with postgeniculate visual field disorders. *Neuropsychol Rehabil* 1992;**2**:21–42.
- 16 **Zihl J**. Eye movement patterns in hemianopic dyslexia. *Brain* 1995;**118**:891–912.
- 17 **Zihl J**, Von Cramon D. Visual field recovery from scotoma in patients with postgeniculate damage. *Brain* 1985;**108**:335–65.

NEUROLOGICAL PICTURE

doi: 10.1136/jnnp.2006.105593

Carotid embolism

A 56-year-old woman presented with fluctuating left-sided hemiparesis. The initial computer tomography scan showed signs of a frontal cortical ischaemia within the territory of the prerolandic artery. Duplex sonography showed a pulsating structure within the right internal carotid artery. An angiographic investigation showed a large polymorphic thrombus within the internal carotid artery (fig 1). Atrial fibrillation was detected in the electrocardiogram. The echocardiogram showed dilation of the left atrium. The heart valves were intact and no cardiac thrombi could be found.

Before a thrombectomy could be performed, the carotid artery became desobliterated spontaneously and further ischaemic lesions developed in the territories of the right arteria cerebri media and arteria cerebri anterior.

Absolute arrhythmia is the most common cause of cerebral thromboembolism.¹ The intracerebral arteries are usually affected.² In contrast, the finding of a large thrombus in the carotid artery as in the present case is very rare.³

Alexey Surov, Curd Behrmann

Department of Radiology, Martin-Luther-University Halle-Wittenberg, Halle (Saale), Germany

Malte Kornhuber

Neurological Hospital, Martin-Luther-University Halle-Wittenberg, Halle (Saale), Germany

Correspondence to: Dr A Surov, Department of Radiology, Martin-Luther-University Halle-Wittenberg, Ernst-Grube-Str 40, D-06097 Halle (Saale), Germany; alex.surov@medizin.uni-halle.de

Competing interests: None declared.

References

- 1 **Berlit P**. Cardiac cerebral embolism. *Nervenarzt* 1983;**54**:389–99.

Figure 1 Angiography image showing large polymorphic thrombus within the internal carotid artery.

- 2 **Ueda S**, Fujitsu K, Inomori S, et al. Thrombotic occlusion of the middle cerebral artery. *Stroke* 1992;**23**:1761–6.
- 3 **Kimura K**, Yasaka M, Minematsu K, et al. Oscillating thromboemboli within the extracranial internal carotid artery demonstrated by ultrasonography in patients with acute cardioembolic stroke. *Ultrasound Med Biol* 1998;**24**:1121–4.