

Catheter retained in the brain



A woman in her fifties presented with acute onset of paraesthesia in her right arm and leg. Neurological examination revealed a patchy reduction of sensibility on the right side of her body. Brain MRI showed an acute ischaemic lesion in the left pons near the ascending spinothalamic tract. Clopidogrel was added to aspirin which the patient was already receiving. Her symptoms quickly resolved.

Three months earlier, she had undergone an elective treatment for a medium-sized right occipital arteriovenous malformation (AVM). Endovascular embolisation of the major arterial branches feeding the AVM was performed followed by surgical AVM removal. During the endovascular procedure, the liquid embolic agent Onyx (Covidien, USA) was used to occlude the arteries feeding the AVM. The agent was injected via a microcatheter. However, the microcatheter also became 'glued' and had to be left 'en bloc' from the right posterior cerebral artery down through the basilar and right vertebral artery to the puncture site in the right inguinal region. The image shows a 3D brain MRI with the catheter visualised in purple. The patient received prophylactic treatment with aspirin.

The pons is supplied by small penetrating arteries arising from the trunk of the basilar artery. The pons infarct in this patient was most likely caused by the mechanical occlusion of an artery ostium by the catheter or by a small thrombus created by the catheter. This is a rare but known complication of a microcatheter being glued into an AVM during endovascular embolization (1, 2). This case report illustrates how newer treatment methods can cause unexpected and potentially serious complications.

The patient has given their consent to the publication of this article.

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