Microsurgical clipping of a small anterior choroidal artery aneurysm: technical pearls

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DESCRIPTION

This case is a presentation of technical tenets for the microsurgical clipping of an anterior choroidal artery aneurysm. The patient described in this case was a 75-year-old woman who presented with the worst headache of her life, involving the left side of her head. The patient was found to have a CT-negative, lumbar puncture-positive subarachnoid haemorrhage, from a 4–5 mm left anterior choroidal artery aneurysm on angiographic studies. Endovascular options were considered to be high risk for this patient due to the small size, wide neck of the aneurysm as well as multiple choroidal perforators. Stent coiling was not considered the best option given the concern for a subarachnoid haemorrhage. The patient described in this case made an uncomplicated postoperative recovery and was discharged to home, without

developing vasospasm or any other subarachnoid-associated complications. This case is valuable to the literature as anterior choroidal aneurysms are small and treacherous. Thus, it is important to not overclip these aneurysms, a key technical note illustrated in [video 1](#). Considering that these arteries are quite unforgiving with multiple perforators and supply posterior limb of internal capsule, thalamus and optic tract, it is important to use all operative adjuncts during these cases, such as indocyanine green angiography, intraoperative cerebral angiography as well as neurophysiological monitoring particularly motor-evoked potentials.

Learning points

- ▶ Operative adjuncts for intraoperative monitoring.
- ▶ Anterior choroidal artery aneurysm.
- ▶ Uncomplicated postoperative recovery.

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Video 1 Anterior choroidal artery aneurysm; aneurysm clipping; subarachnoid haemorrhage; cerebrovascular.

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