Microsurgical clipping of a giant vertebrobasilar junction aneurysm under hypothermic circulatory arrest

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Giant posterior circulation aneurysms pose a significant challenge to neurovascular surgeons. Among various treatment methods that have been applied individually or in combination, clipping under hypothermic circulatory arrest (HCA) is rarely used. We present a 62-year-old man who initially underwent coil occlusion of the right vertebral artery (VA) for a 2.5 cm giant vertebrobasilar junction (VBJ) aneurysm. His neurological condition had declined gradually and the aneurysm grew to 4 cm in size. The patient underwent clip reconstruction of giant VBJ aneurysm under HCA. His postoperative course was prolonged due to his preexisting neurological deficits. His preoperative Modified Rankin Score was 5, and improved postoperatively to 3 at three and six months, and to 2 at one year.

The video can be found here: <http://youtu.be/L53SiLV8eJY>.

KEYWORDS hypothermic circulatory arrest; intracranial aneurysm; giant aneurysm; vertebral artery; microsurgical clipping; basilar artery; video

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