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C-0371 - DELAYED EXTENSIVE BRAIN EDEMA CAUSED BY THE GROWTH OF A GIANT BASILAR APEX ANEURYSM TREATED WITH BASILAR ARTERY OBLITERATION

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Resumen

Objectives: Partially thrombosed giant aneurysms at the basilar apex (BA) artery are challenging lesions with a poor prognosis if left untreated. Here, we describe a rare case of extensive brain edema after growth of a surgically treated and thrombosed giant basilar apex aneurysm.

Methods: We retrospectively reviewed clinical and surgical records as well as analyzed the different radiologic images.

Results: We performed a proximal surgical basilar artery occlusion on a 64-year-old female with a partially thrombosed giant BA aneurysm. MRI showed no ischemic lesions but showed marked edema adjacent to the aneurysm. She had a good recovery, but three months after surgical occlusion, her gait deteriorated together with urinary incontinence and worsening right hemiparesis. MRI showed that the aneurysm had grown and developed intramural hemorrhage, which caused extensive brain edema and obstructive hydrocephalus. She was treated by a ventriculoperitoneal shunt placement. Follow-up MRI showed progressive brain edema resolution, complete thrombosis of the lumen and shrinkage of the aneurysm. At 5 years follow-up the patient had an excellent functional outcome.

Conclusions: Delayed growth of a surgically treated and thrombosed giant aneurysm from wall dissection demonstrates that discontinuity with the initial parent artery does not always prevent progressive enlargement. The development of transmural vascular connections between the intraluminal thrombus and adventitial neovascularization by the vasa vasorum on the apex of the BA seems to be a key event in delayed aneurysm growth. Extensive brain edema might translate an inflammatory edematous reaction to abruptly enlargement of the aneurysm.