To treat or not to treat? – The aneurysmatic question

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Introduction: Basilar artery perforator aneurysms are an extremely rare type of brain aneurysms. Current treatment options are based on a conservative approach and surgical or endovascular treatment, although it is not well defined which option applies best to each patient.

Case Report: We present two cases of subarachnoid haemorrhage (SAH) originating from small basilar artery perforator aneurysms. Two male patients, 66 (patient A) and 57 (patient B) years old, were admitted in the emergency room with severe headache after a Valsalva manoeuvre. Computed tomography scans revealed the presence of SAH, mainly in the territory of the posterior circulation. Initial angiography showed no evidence of aneurysms or other vascular malformations. Angiography with posterior circulation 3D acquisition was repeated, 2 to 3 weeks post-SAH, and the presence of a small saccular aneurysm (1mm) was noted in the ventral surface of the basilar artery in both patients. After multidisciplinary decision, an expectant attitude with careful monitoring was adopted in both patients. Patient A was discharged and angiographic control showed spontaneous thrombosis of the aneurysm. Patient B will soon be re-evaluated with a new angiography. Both patients remain stable.

Conclusion: Due to the rarity of these types of lesions there is still no consensus regarding the ideal treatment option. As in other cases described in the literature, the aneurysm naturally resolved in one of the patients: should we consider this to be the natural course of the disease or might it be just a joyful coincidence?