

Anterior spinal artery aneurysm treatment

Due to the small number of cases reported, the natural history of [anterior spinal artery aneurysm](#) is not well known making it difficult to establish the optimal treatment approach. Various management strategies may be supported, including surgical and endovascular treatment, but It would seem that a wait and see approach is also viable, with control angiogram and treatment decisions based on the evolution of the lesion ¹⁾.

The exact localization of the lesion is of prime importance for planning any intervention.

The surgical approach is more commonly employed in posterior localized aneurysms due to their dorsolateral and superficial location ^{2) 3)}

A 12-year-old boy with spinal cord arteriovenous malformation (AVM) and an associated anterior spinal artery (ASA) aneurysm treated with selective coil placement in the context of subarachnoid hemorrhage (SAH). The patient presented with headache. Head computed tomography scanning revealed no abnormal findings. The cerebrospinal fluid was sampled and analyzed and a diagnosis of SAH was established. Investigation, including magnetic resonance imaging of the cord as well as cerebral and spinal angiography, revealed a conus medullaris AVM and a saccular aneurysm located on the ASA at the T-11 level. The aneurysm was thought to be responsible for the bleeding. Superselective ASA angiography showed that the aneurysm was at the bifurcation between a large coronal artery supplying the AVM and the ASA. The relation of the aneurysm's neck to the main spinal axis and the aneurysm's morphological features indicated that the lesion was suited for endosaccular coil therapy. The aneurysm was selectively occluded, using electrodetachable bare platinum coils. Follow-up angiography immediately after surgery and at 6 months thereafter demonstrated complete occlusion of the aneurysm and a perfectly patent anterior spinal axis. On clinical follow-up examination, the patient remained neurologically intact. When the morphological features of a spinal aneurysm and its relation with the anterior spinal axis are favorable, selective endosaccular coil placement can successfully be achieved ⁴⁾.

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<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4295252/>

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