

Vertebral artery dissection treatment

Except for cases presenting with [hemorrhage](#) or large [ischemic stroke](#), medical therapy should be started emergently. Classically consists of [anticoagulation](#), with [heparin](#) acutely, followed by oral agents (e.g. Coumadin) probably for a total of 6 months. A preliminary study showed antiplatelet therapy was equally as effective

As with traumatic dissections, endovascular techniques are now assuming a more prominent role in management.

► Indications for intervention. Surgery or endovascular techniques (mostly stents, but also occlusion, angioplasty) are required for dissections presenting with SAH (due to their propensity to rebleed) and is recommended for most intradural dissections. For extradural lesions, it is indicated for dissections that progress (angiographically) or for persistent symptoms in spite of adequate medical therapy. Some less malignant lesions may be amenable to endovascular stenting.

► Endovascular treatment. Balloon-mounted, self-expandable, or covered stents have been used relatively infrequently to treat dissections of the internal carotid or vertebral arteries, with good technical results and low procedure-related complication rates.

Given the small number of patients treated and the fact that medical therapy is generally effective, the role of stenting for dissection remains to be defined. It should be reserved for patients in whom medical therapy is ineffective or contraindicated or when the dissection causes symptomatic flow-limiting stenosis.

► Surgical treatment. At the time of surgery, the site of dissection may be recognized by fusiform or tubular enlargement of the artery with discoloration due to blood within the arterial wall (the discoloration has been described as black, bluish, purple, purple red, or brown).

Surgical treatment of intradural dissection when endovascular techniques are not an option includes the following alternatives:

1. non-clippable aneurysms may be candidates for Hunterian occlusion of the VA proximal to the BA (either by microsurgical technique, or by endovascular techniques which may not be as precise). Some may not tolerate clipping the dominant VA, especially if the contralateral VA is hypoplastic. Conversely, some may tolerate bilateral VA occlusion.²⁸ Balloon test occlusion is recommended

a) if the dissection involves the PICA origin, then clip proximal to dissection. PICA then fills from retrograde flow and the reversal of flow across the site of dissection should push the intima back against the wall

b) if the dissection is proximal to PICA and doesn't involve PICA, then trap the aneurysm between clips. PICA fills by retrograde flow

c) if the aneurysm begins distal to the PICA origin, occlude the VA distal to the PICA takeoff

2. combining VA clipping (non-clippable aneurysms may be candidates for Hunterian occlusion of the VA proximal to the aneurysm) with vascular bypass, options:

a) side-to-side PICA-PICA anastomosis

- b) transplantation of the PICA origin into the VA outside the aneurysm
- c) occipital artery-to-PICA bypass
- 3. resection accompanied by autogenous interposition vein graft
- 4. non-occlusive surgical techniques
 - a) clipping with specially designed clips for fusiform aneurysms(e.g.Sundt-Keesclip)
 - b) [wrapping](#): of dubious benefit

From:
<https://neurosurgerywiki.com/wiki/> - **Neurosurgery Wiki**

Permanent link:
https://neurosurgerywiki.com/wiki/doku.php?id=vertebral_artery_dissection_treatment

Last update: **2024/06/07 02:58**

