

Letter to the Editor

A Potential Pitfall in the Use of Carotid Stenting?

We read with interest the paper from Pereira et Al "A Potential Pitfall in the Use of the Monorail System for Carotid Stenting"¹. While the paper focuses on technical aspects of endovascular procedures, we would like to comment on certain aspects related to the clinical indication of carotid stenting (CAS) in the patient reported by the authors.

In the late 1980s carotid endarterectomy was controversial. No rigorous data documented its efficacy although many studies reported high complication rates, with one large study by Medicare reporting that 32% of the procedures were performed for inappropriate indications². In the 1990s the ECST and NASCET trials reported a clear surgical benefit in patients with greater than 70% stenosis³⁻⁵. In patients with 50-69% stenosis the 5-year risk of any stroke or vascular death was only reduced by 5.7% in the NASCET trial⁵. Hence in this group, surgery is only indicated in patients without clear response to medical therapy. Recently, CAS has emerged as an alternative to conventional surgical therapy in high-risk patients. This method is currently under evaluation as an alternative to carotid endarterectomy for patients with severe carotid artery stenosis (greater than 70%), and some randomized trials have been recently published⁶⁻⁸.

The indication of CAS in the patient reported by Pereira et Al is unclear: the clinical history reported by the authors does not allow an appropriate clinical evaluation since there is no description of the symptoms of recurrent transient ischemic attack. Furthermore, the authors make no mention of additional studies that could evaluate a potential cardiac source of embolism nor of cerebral images to rule out other neurological conditions that may mimic a transient ischemic attack. Hence, it is impossible to determine whether the patient's symptoms are a consequence of carotid artery stenosis. Even more, the angiography illustrating the case report shows a carotid stenosis of less than 50% as determined by the NASCET method,

therefore precluding any current indication of invasive treatment (CAS or endarterectomy).

The first principle to prevent a medical complication in Interventional Neuroradiology is appropriate patient selection, an issue sometimes underestimated.

References

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