

A HYBRID TECHNIQUE FOR TREATMENT OF PATIENTS WITH A SYMPTOMATIC CAROTID TANDEM LESION; RESULTS OF 16 CASES

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Background/objective

Carotid tandem lesions consist of a significant internal carotid artery (ICA) stenosis combined with a significant stenosis of the innominate artery (IA) or common carotid artery (CCA).

Although, guidelines state that a hybrid treatment should be considered in these patients, no definitive recommendation for the best treatment approach could be made. We describe the results of our hybrid treatment approach in a consecutive series of patient with symptomatic carotid tandem lesions.

Methods

From 2002 to 2017, 16 consecutive patients with a carotid tandem lesion were treated by a hybrid technique in an academic hospital in the Netherlands. This hybrid technique includes an open retrograde angioplasty and stenting of the IA or CCA, followed by an endarterectomy of the ICA. The primary outcome was defined as the occurrence of any stroke, death, myocardial infarction (MI) or transient ischemic attack (TIA) within the first 30 days of treatment. Secondary outcomes were: I) occurrence of stroke, death, MI or TIA beyond 30 days of treatment and II) occurrence of restenosis (>50%).

Results

In total, three patients had a significant stenosis of the IA, and 13 patients had a significant stenosis of the CCA combined with an ICA stenosis. Within 30 postoperative days, one patient developed an MI. No strokes, TIAs, MIs or deaths were reported in the remaining patients. During follow-up (median 15 months, range 11-65), two patient died. No strokes, TIAs, myocardial infarctions or deaths were reported in the remaining patients. No symptomatic restenoses were reported. One patient developed an asymptomatic restenoses in the CCA without any restenoses of the ICA, and one patient developed an asymptomatic occlusion of the ICA combined without restenoses of the CCA.

Conclusion

A hybrid technique could be a potential treatment option in this high risk patient group.