

SYMPTOMATIC CAROTID NEAR-OCCLUSION CAUSES A HIGH RISK OF RECURRENT IPSILATERAL ISCHEMIC STROKE

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Background

Carotid near-occlusion is a severe carotid stenosis that causes a size reduction of the internal carotid artery distal to the stenosis¹⁻³. Based on the degree of size reduction, carotid near-occlusion could be subdivided into carotid near-occlusion with full collapse (A) and carotid near-occlusion without full collapse (B)¹⁻³.

The reported short-term risk of recurrent ipsilateral ischemic stroke among patients with symptomatic near-occlusion has varied between recent studies (5-43%), with a high risk possibly limited for near-occlusion with full collapse, lower for near-occlusion without full collapse⁴⁻⁵.

The aim of this study was to assess the risk of recurrent ipsilateral ischemic stroke in patients with symptomatic near-occlusion with and without full collapse.

Methods

We consecutively included patients eligible for revascularization with conventional $\geq 50\%$ carotid stenosis (n=262), near-occlusion without full collapse (n=57) and near-occlusion with full collapse (n=42). The primary endpoint was a preoperative recurrent ipsilateral ischemic stroke within 90 days after the presenting event.

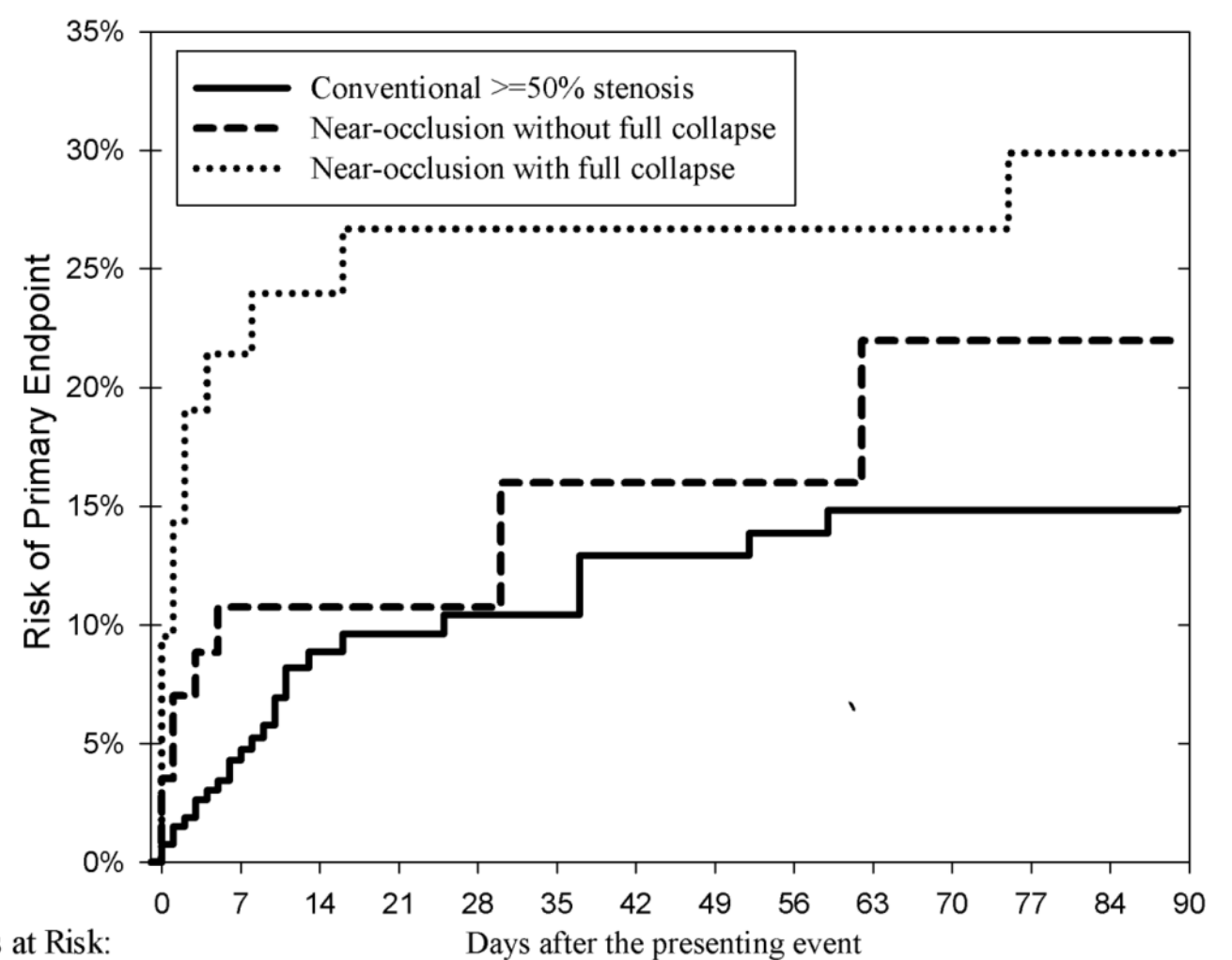
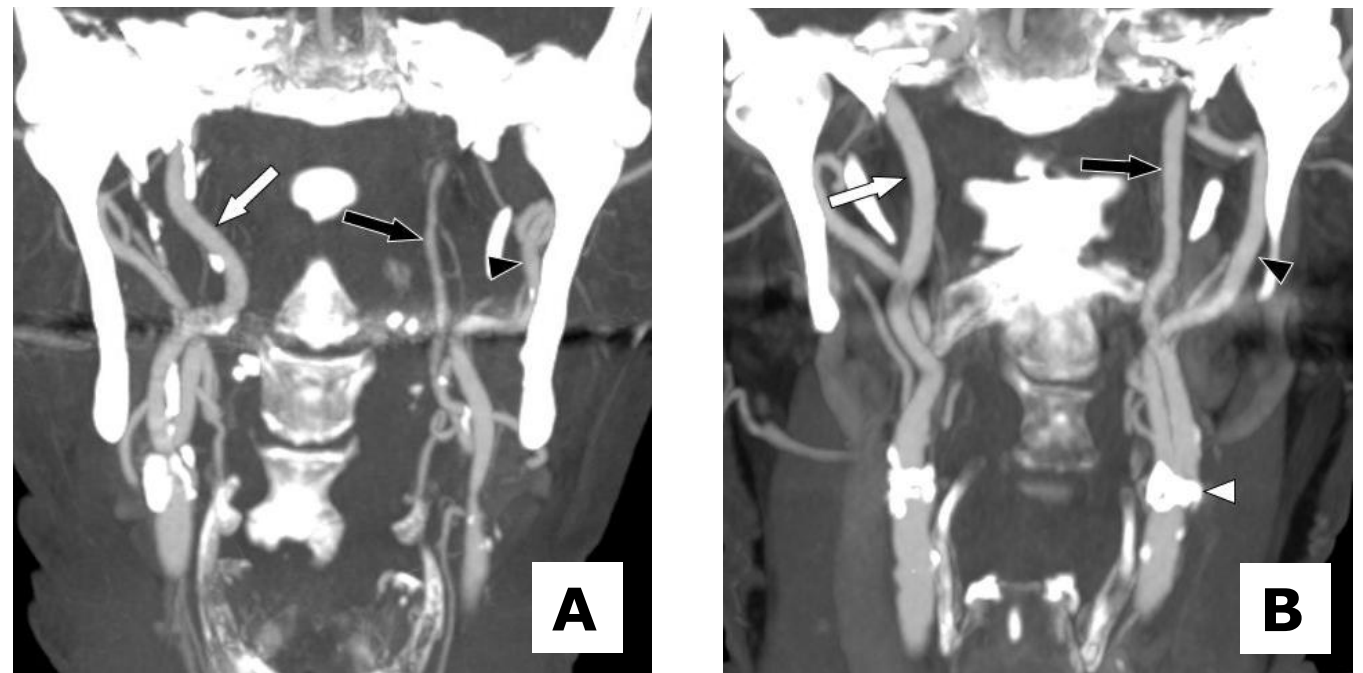
Results

The 90-days risk of recurrent ipsilateral ischemic stroke was 15% (95%CI 9-20%) among conventional $\geq 50\%$ stenosis, 22% (95%CI 6-38%) among near-occlusion without full collapse and 30% (95%CI 16-44%) among near-occlusion with full collapse (p=0.01, log rank test). In multivariate analysis, near-occlusion with full collapse had a higher risk of recurrent ipsilateral ischemic stroke (adjusted HR 2.6, 95%CI 1.3-5.3) and near-occlusion without full collapse tended to have a higher risk (adjusted HR 2.0, 95%CI 0.9-4.5) than conventional $\geq 50\%$ carotid stenosis.

Only 24% of near-occlusion with full collapse underwent revascularization treatment, common causes for abstaining were misdiagnosis as occlusion (31%), deemed surgically unfeasible (21%) and low perceived benefit (10%)

REFERENCES

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Conclusions

Symptomatic carotid near-occlusion causes a high short term risk of recurrent ipsilateral ischemic stroke, especially near-occlusion with full collapse.