Commentary on “Comparison of Cognitive Function after Carotid Artery Stenting versus Carotid Endarterectomy”

L.K. Rathenborg *
Department of Vascular Surgery, University Hospital of Copenhagen, Copenhagen, Denmark

The authors deal with an aspect of carotid artery disease to which vascular surgeons in general have not given much consideration: does carotid intervention (endarterectomy or stenting) affect cognitive function?

The ambitious aim of this study was to reveal possible differences in cognitive function after carotid endarterectomy (CEA) or carotid artery stenting (CAS). There were 13 papers available to the authors for study. As the heterogeneity of this material is considerable, the conclusion is predictable: no differences could be demonstrated.1

Cognitive function includes memory, attention, mood, and language. Therefore, any possible initiative towards improving dysfunction is welcomed. At the same time, the risk of cognitive deterioration associated with interventions performed with the intention of preventing future stroke should be taken into account.

Today, it is recommended that carotid intervention in patients with symptoms of transient ischemic attack or stroke is performed very early after the index symptom.2,3 To manage evaluating the level of cognitive function (which requires advanced and time-consuming neuropsychological tests) prior to carotid intervention may therefore be the number one challenge of future studies. Clarifying the underlying pathophysiology (embolic or hemodynamic?) in patients with impaired cognitive function seems urgent. Thereafter, the influence of carotid intervention upon cognitive function may be easier to evaluate.

Vascular surgeons should look forward to, but must await the results from, such studies and keep to established guidelines when selecting patients for carotid intervention.1,4 And until further notice, CEA as well as CAS must continue to be regarded solely as (secondary) stroke prophylaxis.

REFERENCES

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* L.K. Rathenborg, Department of Vascular Surgery, University Hospital of Copenhagen, Rigshospitalet-3111, Blegdamsvej 9, 2100 Copenhagen, Denmark.
E-mail address: lisbet.knudsen.rathenborg@dadlnet.dk
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