

While carotid artery stenting (CAS) has been gaining popularity as an alternative to carotid endarterectomy (CEA), the perioperative stroke rate following contemporary CAS remains significantly higher than that in CEA. The purpose of this study was to assess perioperative (within 30-day) therapeutic results in patients with carotid stenosis (CS) after the introduction of preoperative carotid magnetic resonance plaque evaluation in a single center offering both CEA and CAS. **METHODS:**

Based on prospectively collected data for patients with CS who were scheduled for carotid revascularization, retrospective analysis was conducted of 295 consecutive CS patients. Selection of an intervention was made after consideration on periprocedural risks for both CEA and CAS. Concerning risk factors for CAS, magnetic resonance plaque imaging results were emphasized with a view toward reducing embolic complications. **RESULTS:**

CAS was performed for 114 patients and CEA for 181 patients. Comparing baseline characteristics of the 295 patients, age, T1 signal intensity of plaque, symptomatic CS, urgent intervention, and diabetes mellitus differed significantly between CAS and CEA patients. In patients who received CAS, new hyperintense lesions on diffusion-weighted imaging (DWI) were confirmed in 47 patients. New hyperintense lesions on DWI were recognized in 21.4% of the patients who received CEA (n=39), significantly less frequent than in CAS patients. **CONCLUSIONS:**

The overall short-term outcome of CEA and CAS is entirely acceptable. Preoperative carotid magnetic resonance evaluation of plaque might contribute to low rates of ischemic complications in CAS ¹⁾.

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Fukumitsu R, Yoshida K, Kurosaki Y, Torihashi K, Sadamasa N, Koyanagi M, Narumi O, Sato T, Chin M, Handa A, Yamagata S, Miyamoto S. Short-term results of carotid endarterectomy and stenting after the introduction of carotid magnetic resonance imaging: a single institutional retrospective study. *World Neurosurg*. 2017 Feb 15. pii: S1878-8750(17)30194-8. doi: 10.1016/j.wneu.2017.02.032. [Epub ahead of print] PubMed PMID: 28214642.

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