

Carotid artery stenosis treatment

It is important to assess risks for CEA carefully including anatomical factors and comorbidities and to elaborate each strategy for each operation based on preoperative imaging studies including [carotid artery ultrasonography](#), [magnetic resonance imaging](#), and [angiography](#). In surgery, there are many tips on operative position, procedure, shunt usage, and monitoring to perform a safe and smooth operation. Now that [carotid artery stenting](#) has been rapidly developed, a better understanding of CEA is required to treat carotid artery stenosis adequately. ¹⁾

For symptomatic extracranial [carotid artery stenosis](#) (SECS) patients who cannot undergo early [carotid endarterectomy](#), early carotid artery stenting (CAS) is effective and safe if selectively indicated considering disease severity. Early and delayed CAS provide comparable mRS scores, the incidence of symptomatic thromboembolic complications, and intracranial bleeding with or without cerebral [hyperperfusion syndrome](#) (CHS) ²⁾.

Treatment of CS consists of best medical treatment and carotid revascularization (CR), including carotid endarterectomy (CEA) and [carotid artery stenting](#) (CAS). Both CR techniques have their own procedural risks. Therefore, selection of the appropriate treatment for patients with CS is relatively complicated. Many studies and guidelines have reported the efficacy of each treatment for both symptomatic and asymptomatic patients. However, the results are still controversial, especially concerning the efficacy and safety of CEA and CAS ³⁾.

Carotid artery stenting

see [Carotid artery stenting](#) (CAS).

Carotid endarterectomy

see [Carotid endarterectomy](#) (CEA).

¹⁾

Hara T, Rai Y. [Carotid Endarterectomy](#). *Adv Tech Stand Neurosurg*. 2022;44:187-207. doi: 10.1007/978-3-030-87649-4_10. PMID: 35107680.

²⁾

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³⁾

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