

Carotid Artery Stenting: What Is Its Role?

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Stroke is the third most common cause of death in the United States and carotid artery disease is the most common cause of stroke. In recent years, carotid stenting has become an alternative for patients who are high risks for surgery.

Carotid stenting is a procedure in which a stent is delivered and expanded inside the carotid artery to increase blood flow in the area blocked by plaque. It is only indicated for patients with severe blockage. Not all patients are candidates for stenting. Patients with a completely blocked carotid artery, a very torturous artery, or a recent history of intracranial bleeding are not suitable for stenting.

Carotid stenting is currently FDA-approved for treating high-risk symptomatic patients with blockage greater than 60 percent. It also is approved for treating asymptomatic patients who are high-risk with more than 80 percent blockage. High-risk patients refer to those with severe cardiopulmonary disease, patients with recurrent blockage following carotid intervention, prior neck irradiation or dissection, and those patients with plaque that are not easily accessible.

Carotid stenting is not without complications. Elderly patients, diabetic patients and symptomatic patients are at higher risk. Multiple clinical studies have shown that carotid stenting has either a similar or higher complication rate than surgery. However, there are still considerable controversies.

Presently, a large National Institutes of Health-sponsored clinical trial is still ongoing. This multi-centered trial is expected to provide more information on carotid interventions.

Another common concern of carotid stenting is the long-term durability. Although severe restenosis is relatively rare, moderate restenosis is not uncommon. Patients with severe restenosis may need to undergo additional interventions. Therefore, it is extremely important for patients to be vigilant in their follow-up with physicians after carotid stenting.

Only physicians who can perform both carotid surgery and stenting are able to give patients an objective opinion of the best treatment. Vascular surgeons are in the best position to offer patients an unbiased advice. Patients should be given the opportunity to consider all therapeutic options and choose the best treatment option available.

To learn more about your vascular health and find a vascular surgeon visit VascularWeb.org.

