tions, including contralateral carotid artery occlusion (20%), heart disease (41%), and hypertension (72%), among other illnesses.

In conclusion, currently CEA is considered the standard for treating severe (≥70%) carotid stenosis. CAS should be regarded as a valid option only if it provides results equal to or better than those of CEA. No doubt CAS has some advantages; it is a less invasive and less time-consuming procedure, and is associated with a lower incidence of cranial nerve injury. However, CEA performed after noninvasive diagnostic testing and with the patient under local anesthesia can provide better results in the subgroup of patients with comorbid conditions.

Presently, CAS should be preferred for treatment of recurrent stenosis caused by myointimal hyperplasia, post-irradiation, and long or distal stenoses. In the future CAS may replace CEA in all, or almost all, patients if technical progress and experience increase the safety and results of the procedure.

Germano Lucertini, MD

Sezione di Chirurgia Vascolare
Università degli Studi di Genova
Genoa, Italy

REFERENCES

1. Fiorani P, Sbarigia E, Speziale F, Antonini M, Fiorani B, Rizzo L, et al. General anesthesia versus cervical plexus block and perioperative complications in carotid artery surgery. Eur J Vasc Endovasc Surg 1997;13:37-42.
2. Sternbach Y, Illig KA, Zhang R, Shortell CK, Rhodes JM, Davies MG, et al. Hemodynamic benefits of regional anesthesia for carotid endarterectomy. J Vasc Surg 2002;35:333-9.
3. McCarthy RJ, Nasr MK, McAteer P, Horrocks M. Physiological advantages of cerebral blood flow during carotid endarterectomy under local anaesthesia: a randomised clinical trial. Eur J Vasc Endovasc Surg 2002; 24:215-21.
4. Belardi P, Lucertini G, Ermirio D. Stump pressure and transcranial Doppler for predicting shunting in carotid endarterectomy. Eur J Vasc Endovasc Surg 2003;25:164-7.

doi:10.1016/S0741-5214(03)01048-6

Reply

My coauthors and I appreciate the comments from Dr Lucertini. I suspect that we are in near-agreement on clinical indications for carotid endarterectomy (CEA) and stenting (CAS). His results with CEA in a clinical series with good and high-risk patients are superb. While our current indications for CAS include restenosis after CEA, radiation-induced stenoses, and anatomically high lesions, the group with medical comorbidities constitutes a more controversial category. We have defined the category in our publication and recommend CAS in this subset of patients. Although CEA and CAS appear to have comparable 30-day stroke and death rates in a recent randomized comparison,[1] surgeons with results similar to those of Dr. Lucertini in the high-risk group should continue to select CEA on the basis of local practice and referral patterns. For good-risk patients, CEA continues to be the preferred procedure pending results from ongoing randomized clinical trials such as CREST[2] or other national and international efforts.

Robert W. Hobson II, MD

New Jersey Medical School
Newark, NJ

REFERENCES

1. Yadav J. Stenting and angioplasty with protection in patients at high risk for endarterectomy: the SAPPHIRE study. American Heart Association. Circulation 2002;106:2986a.
2. Hobson RW II, Brott T, Ferguson R, Roubin G, Moore W, Kuntz R, et al. CREST: carotid revascularization endarterectomy versus stent trial. Cardiovasc Surg 1997;5:457-8.

doi:10.1016/j.jvs.2003.07.026

Regarding "Graft patency is not the only clinical predictor of success after exclusion and bypass of popliteal artery aneurysms"

Jones et al (J Vasc Surg 2003;37:392-8) investigated three types of popliteal aneurysm exclusion: proximal and distal ligation with short (type I) and long (type II) segment isolation, and single proximal or distal ligation (type III). On the basis of ultrasound scans used to determine size, patency, and feeding branches in 36 limbs, the authors found that exclusion required adequate vascular isolation of the aneurysm to prevent late enlargement. Inasmuch as type I exclusion was found superior to both type II and type III exclusion with regard to aneurysm diameter reduction over time, the authors concluded that exclusion is best performed with proximal and distal ligation directly adjacent to the aneurysm.

However, independent of the type of exclusion, aneurysms with visualized feeding branches were associated with a significant degree of late enlargement. This finding is of major importance, because patent branches cannot be treated with an exclusion technique when ligation of the popliteal artery alone is performed.

Jones and colleagues did not mention the dorsal approach to the popliteal artery, through the popliteal fossa. However, this method may be advantageous in treatment of popliteal aneurysm in at least half of patients.[1] Provided distinct criteria are met, such as absence of aneurysm involvement of the femoral artery or the common peroneal trunk, this approach facilitates reduced morbidity. The procedure is carried out with the patient in a prone position. Exposure of the aneurysm in the popliteal fossa is excellent, and it is incised longitudinally, similar to the technique in aortic aneurysm surgery. After debridement or excision, which eliminates pressure symptoms and the possibility of late rupture, all tributary vessels can be tied or clipped under direct visualization and a reversed vein graft, or occasionally an expandable polytetrafluoroethylene interposition graft, is placed in the aneurysm sack.[2] As a result of better hemodynamic performance of the end-to-end anastomoses (restoring the anatomic course), the rate of postoperative thromboembolic complications is significantly reduced, resulting in better long-term graft patency.[3]

We agree with Jones and colleagues that graft patency is not the only clinical predictor of success after exclusion and bypass of popliteal artery aneurysms. However, with regard to symptoms and late rupture, the posterior approach must be mentioned as a valuable, and in our view superior, alternative.

Omke E. Teebken, MD
Maximilian A. Pichlmaier, MA, MD
Axel Haverich, MD, PhD

Division of Thoracic and Cardiovascular Surgery
Hannover Medical School
Hannover, Germany

REFERENCES

1. Mahmood A, Salaman R, Sintler M, Smith SR, Simms MH, Vohra RK. Surgery of popliteal artery aneurysms: a 12-year experience. J Vasc Surg 2003;37:586-93.
2. Lim RA, Scott SA, McKittrick JE. Surgical approach to the treatment of popliteal aneurysm. Ann Vasc Surg 1989;3:1-4.
3. Babatasi G, Rossi A, Massetti M, Kapadia N, Maiza D, Khayat A, et al. [Value of the posterior route in the surgical treatment of popliteal aneurysm]. J Chir (Paris) 1993;130:433-6.

doi:10.1016/S0741-5214(03)01046-2