LETTERS TO THE EDITOR

Regarding "The Carotid Surgery for Ischemic Stroke trial"

Dr Eckstein and colleagues are to be congratulated on the results of their prospective observational multicenter trial on the safety of carotid endarterectomy (CEA) after a nondisabling ischemic stroke.[1] From March 1997 to August 2000, a remarkable 164 patients experiencing nondisabling stroke underwent CEA within the first 6 weeks of onset of the neurologic event. The perioperative stroke and mortality rate was 6.7% (11 of 164 patients), with a crude perioperative stroke rate of 6.1% (10 of 164 patients). On the basis of these findings, the authors concluded that early CEA, within 6 weeks after a related ischemic stroke, carries perioperative mortality and stroke rates comparable to those reported in controlled multicenter randomized trials.[2,3]

We recently looked at this issue, prospectively comparing perioperative outcome between patients with a carotid lesion and ipsilateral nondisabling stroke who underwent early CEA, ie, within 30 days, or delayed CEA, ie, more than 30 days after the neurologic event.[4] Over 48 months, all patients who had a nondisabling ischemic stroke and were referred to our section and scheduled for elective CEA were invited to take part in a prospective randomized early versus delayed CEA protocol. Of the 92 patients who met inclusion criteria, 86 agreed to the randomization protocol and 6 refused. Forty-five patients were randomized to receive CEA within 30 days of stroke (median, 18 days; range, 15-30 days), and 41 patients were to receive CEA more than 30 days after stroke (median, 59 days; range, 38-120 days). No perioperative deaths occurred in either group. Perioperative stroke incidence was comparable in the two groups (1 of 45 patients [2%] vs 1 of 41 patients [2%]; both strokes were ipsilateral to the side operated on and occurred within the first 12 hours of CEA, and both were minor. No new stroke occurred during the waiting period in the delayed group, nor were there any late strokes in either group. No patients had perioperative cerebral hemorrhage, the most feared complication of early CEA, confirming that this catastrophic event is rare after early CEA. Both neurologic events were probably the outcome of small embolisms occurring during carotid dissection or coming from the endarterectomized site when blood flow was restored, bearing no relationship to timing of surgery. This finding correlates closely with that reported by Eckstein et al,[1] showing that even in this patient population the most common cause of perioperative failure is technical error and can thus be averted by improving the technical aspects of the surgical procedure.[5] The study by Eckstein and colleagues, like our own, provides further evidence that timing of surgery does not influence benefit of CEA in this patient population. There are also several considerations, mentioned in the medical literature, that might well tip the balance in favor of early CEA, ie, risk for recurrent stroke during the waiting period, complications of interval warfarin sodium therapy or other special regimens, interruption of physical therapy programs, and, last, the huge stress engendered in some patients by the waiting period.

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Regarding "New method to create a vascular arteriovenous fistula in the arm with an endoscopic technique"

We read with interest the technical article by Hayakawa et al,[1] who describe a minimally invasive technique for harvesting the upper arm basilic vein for creation of vascular access. This technique is similar to endoscopic harvesting of the saphenous vein in the leg for use in peripheral arterial and coronary artery bypass grafting.[2,3] Hayakawa and colleagues report 10 patients who received treatment with this endoscopic technique with a commercially available device, with satisfying results. Such video-assisted endoscopic techniques may be superior to conventional basilic vein transposition in terms of fewer postoperative complications, eg, infection, hematoma, seroma formation, and edema, as a result of extensive skin flap dissection. Moreover, vascular access cannulation may be carried out in an early phase because of improved wound healing.

The authors raised the suggestion that this technique has not been described before, as can be established from the listed references. However, Martinez et al[4] were the first to report on endoscopic basilic vein transposition, and we have also reported our experience.[5] In these reports, small series of 9 and 12 patients, respectively, were operated on with use of various endoscopic devices to harvest the basilic vein. The outcome in both studies was similar, with a low incidence of complications and patency ranging from 75% to 88% after 1 year of follow-up.

Several devices for minimal invasive harvesting are commercially available. Subcutaneous access may be achieved with balloons introduced and expanded in the subcutaneous tissue with gas inflation or with expandable devices to create space for dissection of structures. The Maastricht group developed a custom-made dissection hook, suitable for introduction of a 5 mm endoscope. Standard endoscopic instruments were used for vein dissection and harvesting. In all of our patients, a complete endoscopic technique was feasible without conversion to open surgical vein harvesting.

The advantages of this new method are obvious: small incisions with less risk for hematoma, edema, and cutaneous nerve damage. In addition, because of the small incisions, postoperative pain may be minimal and early cannulation may be possible.

In concordance with Hayakawa and colleagues, we conclude that video-assisted endoscopic basilic vein transposition is a promising surgical technique for creation of vascular access in patients undergoing dialysis.

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