the years to 100% in 2003, and the comparison is a retrospective cohort analysis. The decision to treat or not to treat was left to the interventionist, who was not a neurologist. Along with other methodologic drawbacks, such as only registration of the complication rate during the hospital stay, any conclusion in comparison with our article should not be drawn.

The short-term results of our study revealed no difference between CAS and CEA (one vs no stroke, Table III). Importantly, however, there are no reports that EPDs are able to reduce secondary stroke rates on the long term. There is strong evidence that the reported stroke rates of four in 42 after CAS vs none in 42 after CEA in the long-term follow-up from our study correlate with the higher incidence of restenosis, and not with whether EDPs were used.

It is also notable that the study was performed in a high-volume center in Germany with very experienced surgical and interventional physicians. No residual stenosis was left after the primary procedure, and the intervention was performed with a low peri-interventional complication rate (Table III). An influence of a learning curve can be excluded. We admit that the exclusive use of the carotid Wallstent (Boston Scientific, Watertown, Mass) might influence the results of this study. However, this was extensively discussed in the second paragraph on page 97. Unfavorable results of prospective randomized trials should not be questioned with a remark that new devices might be more beneficial.

Most recent data of the SPACE (Stent-Supported Percutaneous Angioplasty of the Carotid Artery versus Endarterectomy) study, which was randomized until February 2006 and used different and "better designed and improved" stent types, support our findings. In the 1-year follow-up, a twofold higher restenosis rate of >8% was observed after CAS vs CEA (Prof. Dr. H. Eckstein, personal communication). These data confirm our conclusion that CEA seems to be superior to CAS concerning the development of restenosis and that ongoing trials have to gather long-term data including restenosis and reintervention rates as well as secondary stroke rates and survival.

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Regarding "Easy alternatives to difficult clamping of distal vessels of the leg"

We have read with great interest the paper by August et al. Actually, the use of ordinary clamps can result in arterial damage, especially in endstage renal disease (ESRD) patients affected by critical limb ischemia (CLI).

Our group performed more than 1500 open distal arterial reconstructions of tibial and pedal arteries in CLI patients with tissue loss and gangrene (Rutherford 5-6). We used autologous material in 92% of grafts, preferably greater saphenous vein, followed by lesser saphenous and arm veins.[1,2] Comorbidities were diabetes 56%, clinically apparent coronary artery disease (CAD) 47%, previous aorto-coronary bypass graft (CABG) 8%, chronic obstructive pulmonary disease (COPD) 57%, chronic renal insufficiency 20%, and ESRD 10.4%.[3]

Finally, 164 limbs in ESRD patients with CLI were revascularized. The majority of these patients had a very diseased distal arterial network with heavily calcified arteries, poor run-off, and relevant comorbidities. Consequently, bypasses were more distal and technically demanding if compared to the standard CLI patients.[3] In our experience, as in others, renal insufficiency entailed a worse limb salvage ($P = .048$), and ESRD has been associated with significantly worse limb salvage ($P < .001$) and patient survival ($P = .011$).[4-6]

In this kind of patient, often distal arteries are not compressible due to extensive wall calcification.

For several years, by performing distal anastomosis, we have been putting a clamp only on the proximal part of the target vessel and we have been applying, as August et al, an intravenous cannula in order to occlude the distal end of the arteriotomy in tibial and plantar vessels. On the contrary to the authors, we did not cut the top of the cannula, but we did connect it by a 20-cm long plastic tube to a 30-mL syringe filled with heparinated (.20%) saline (Fig 1). The length of the tube has been useful to not hinder the suturing maneuvers. The whole system allowed a regular flushing with heparinated saline into the distal runoff, preventing thrombosis of the lumen in cases of poor retrograde bleeding. The size of cannulas varied between 18G and 24G according to the lumen of the artery.

Despite the caliber adaptation, in few cases it was not possible to move the cannula forward into the artery, because of the irregularity of the arterial wall. In these situations, we chose to clamp the artery only proximally to the arteriotomy, as we do in all cases, but not to clamp it distally at all. In order to minimize blood loss, we positioned the patient in an extreme Trendelenburg position, with the head raised to avoid discomfort, and we clamped the distal artery by gentle external digital compression (Fig 2). If the digital occlusion was ineffective due to stiffness of the arterial wall, we simply flushed the anastomosis area by pouring saline that flowed away with the blood thanks to the upraised position of the limb.

In conclusion, even though we agree with August et al about the advantage of the use of an intravenous cannula for distal arterial occlusion, we suggest the artifices we use since they critically

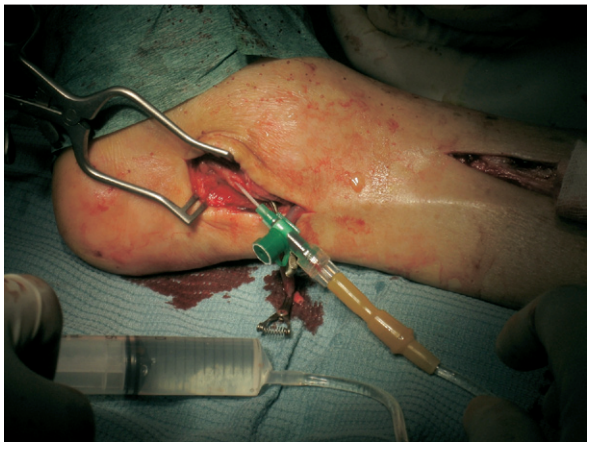

Fig 1. Intravenous cannula has been inserted into the plantar artery. The cannula has been connected to a syringe with heparinated solution.

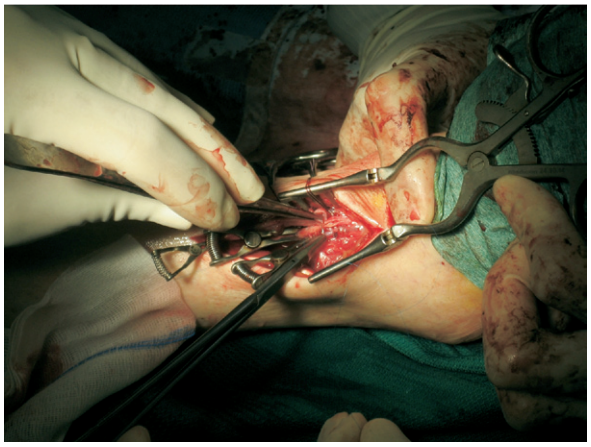

Fig 2. Gentle external occlusion of the pedal arteries, by digital compression. Patient in extreme Trendelenburg position.

improve the technique and lessen arterial trauma in calcified and diseased arteries.

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Reply

We are pleased that you are interested in our report on the easy alternatives to the difficult clamping of distal vessels of the leg.[1] We would also like to congratulate our colleagues on their remarkable experience in distal arterial reconstructions for the tibial and pedal vessels.

We understand your concern regarding the difficulty of moving the cannula forward into the artery in certain cases with severe irregularity of the arterial wall. Although using wide ranges of intravenous cannulas (24-14G) we have not encountered this difficulty, certainly larger series are needed to draw definitive conclusions regarding the safety of the technique.

In their letter, Spinelli and colleagues propose connecting a 20-cm long plastic tube to the cannula in order to flush heparinated saline during the procedure, however, according to our experience (as when using Fogarty catheters to occlude the distal vessel), this maneuver makes it more likely that there will be suture knotting and tingling and the accidental declamping following an involuntary withdrawal of the catheters. The authors also suggest some interesting artifices to improve our technique such as an extreme Trendelenburg position and gentle digital compression or flushing the anastomosis area by pouring saline with the limb in an upraised position. We have no experience with these techniques, but we agree with Spinelli that they might be helpful under certain circumstances.

Once again, we appreciate your interest in our article. We hope that this technique helps you and others to address difficult clamping of the distal vessels of the leg during below-knee revascularization.

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Regarding "Peroneal artery-only runoff following endovascular revascularization is effective for limb salvage in patients with tissue loss"

Until the mid-seventies, the standard of care for patients with critical limb ischemia and having only peroneal artery runoff was amputation. Several publications at that time[1,2] paved the way for reconsideration of this attitude, enabling progressive improvement of patency and limb salvage outcomes.[3-5] Dosluoglu et al have added the additional dimension of endovascular revascularization to this pool of positive experience but have inappropriately described our early work as showing peroneal bypasses to be "not favorable." To the contrary, we described this operation as "definitely favorable," "capable of providing limb salvage," that "inoperability of peroneal arteries should be considered a myth," and more. Clearly a call at that time for change. The stage was set for future successes by the very satisfactory results of the seventies.

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