

statistical analysis as Dr Rodrigues suggests. Moreover, it is equally inappropriate to term a fistula "primarily patent" after it has undergone a revision.

Creating and maintaining autogenous fistulas has evolved into a central issue in the care of the dialysis patient. Surgeons are going to greater lengths to pursue this goal, such as transposed forearm vein and upper arm vein fistulas. Dr Rodrigues has suggested in his published works that even extensive balloon angioplasty of diffusely small forearm arteries can increase the utilization of native fistulas, although he admits that many of his patients require repeated, frequent interventions to maintain access patency.<sup>4</sup> This approach, although technically challenging and gratifying for the interventionalist, is not consistent with our own goal of minimizing interventions that dialysis patients must endure through better selection of an access procedure that will function with fewest interventions throughout the patient's life.

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#### Regarding "Cutaneous microcirculation in the neuropathic diabetic foot improves significantly but not completely after successful lower extremity revascularization"

We have read with interest the paper by Arora et al (*J Vasc Surg* 2002;35:501-5) on the effects of lower limb macrovascular intervention on the microvasculature of patients with diabetes mellitus. There are two points in the methodology and one point on the interpretation of results we would like to highlight, and we would be grateful for the opinion of the authors. First, the group receiving revascularization consisted almost entirely of type II diabetes patients, in contrast to the other two groups of patients, particularly in the diabetes alone group, where type I diabetes was dominant. Would it have been better to match the enrolled patients in groups D and DN to those of DI and avoid potential errors due to differences in the two diabetic populations?<sup>1</sup> Secondly, the group of diabetic patients with neuropathy are declared nonischemic by virtue of the presence of pulses and the absence of symptoms. The diabetic patient with lower limb polyneuropathy may not present with classical symptoms of lower limb ischemia and indeed may have palpable pulses in the presence of significant stenoses.<sup>2,3</sup> Should a more robust screening method of assessing vasculature, such as color duplex, been employed?<sup>4</sup> In comparing the hyperaemic responses to stimulation, might the presence of an already dilated cutaneous microcirculation with reduced vascular resistance, as found in autonomic neuropathy,<sup>5</sup> limit the response to stimulation even after successful revascularization and be an

indicator of microcirculatory response, rather than absolute perfusion?

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#### Reply

We agree with Dr Williams and his colleagues with the point regarding the number of patients with type 1 or 2 diabetes in the three study groups, namely that it would be preferable to have a similar number of type 1 and 2 diabetic patients. However, we opted out for these selection criteria because it was impractical to recruit in the second and third group type 2 diabetic patients matched for age and duration of diabetes to that of the first group and without any serious complications. In any case, we believe that the inclusion of some type 1 diabetic patients does not influence the results and the conclusions of the study that were mainly based on the comparison of the preoperative and postoperative results in the first group. Regarding the second point, namely the criteria of diagnosis of peripheral arterial disease, numerous studies have indicated that all noninvasive methods are unreliable, and we do not think that would add any substantial information in our study. The main reason for this is that even if we included some patients with peripheral arterial disease, our results indicate that the postoperative measurements of the first group were similar to that group and therefore far from being normal. This point would be valid in case our results indicated that the postoperative measurements in the first group were higher when compared with those of the second group. In that case, a point could be made that the results were mainly related to the possible presence of considerable peripheral arterial disease in group 2. Finally, regarding the third point, it should be reminded that previous studies in our unit have shown that baseline measurements are similar in diabetic patients with or without neuropathy or peripheral vascular disease.<sup>1</sup> Similar results were also observed in the present study but were not reported as we extensively reported on this issue earlier. Therefore, as the baseline blood flow was similar in all groups, we believe that

the observed changes indicate inability to increase perfusion after stimulation

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**Regarding “Endograft limb occlusion and stenosis after ANCURE endovascular abdominal aneurysm repair”**

We read with interest the article by Parent et al.<sup>1</sup> We have currently performed 114 aortic endograft procedures, with the majority of these devices having a columnar support (Aneurx, 101; Ancure, 17). Unfortunately, supported grafts are not free of limb occlusions. We have currently noted two limb occlusions in the Aneurx device and three limb dysfunctions that required stenting to prevent occlusion (5%). Interestingly, both the Aneurx limb occlusions occurred in patients with extensions placed in the external iliac arteries after coiling of the internal iliac artery. Both Aneurx limb occlusions were treated with a femoral-to-femoral crossover graft. One patient died after the revascularization for limb occlusion (Fig 1).

Among a total of 17 Ancure devices implanted, we have had one total graft thrombosis and one limb dysfunction requiring

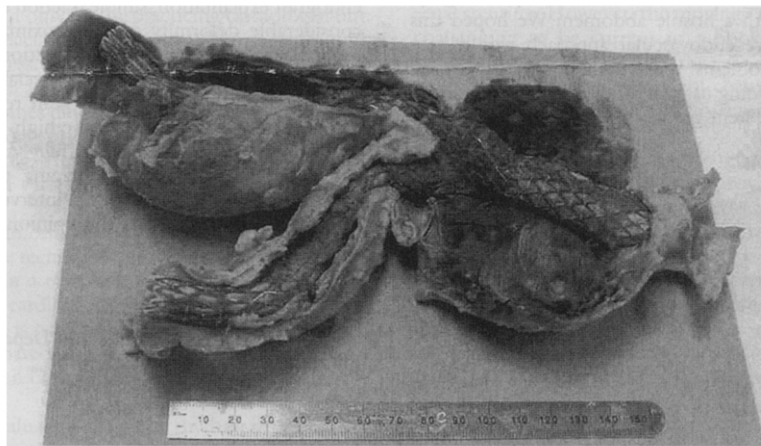


Fig 1. Aneurx graft in situ explant in patient with limb occlusion and death.

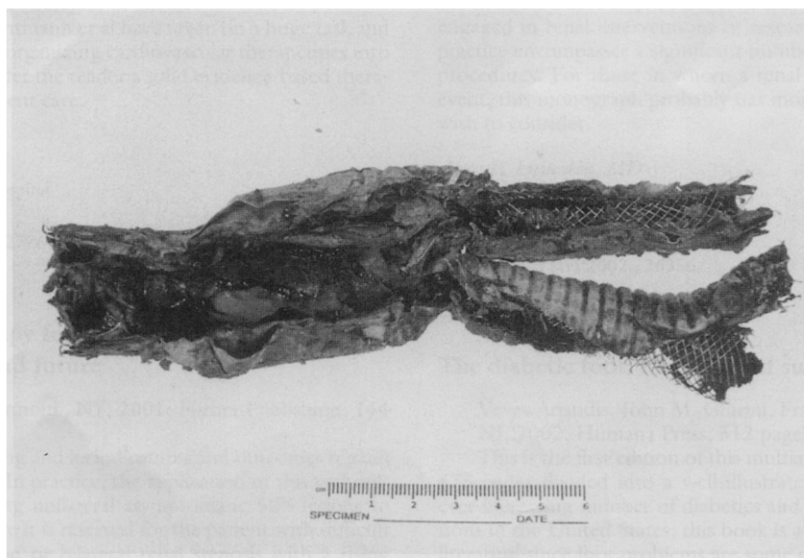


Fig 2. Explanted Ancure endograft reveals proximal neck angulation. Note presence of wallgrafts in limbs for added columnar support.