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although there is no literature on the subject. In addition, our rate of autogenous AVA construction has reached about 70% with the aid of preoperative mapping and other techniques.<sup>5</sup> We therefore do not perform transpositions at all costs but rather in selected patients, especially in those with known or suspected hypercoagulability.

Another factor that arises from the use of transposed veins is that if they occlude, that arm can no longer be used for any kind of AVA. On the other hand, at least two prosthetic AVAs can be constructed in the same arm in case of occlusion.

We suggest that vein transposition can be used to increase the availability of autogenous veins for AVA but that they should be used selectively, and if used, then skip incisions might reduce morbidity and allow earlier initiation of venipuncture.

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## Reply

We thank Shemesh and Olsha for their comments and appreciate the points raised because they further underscore many of the issues we feel are essential to amplify the use of autogenous veins for the creation of arteriovenous fistulas. Regarding the use of skip incisions, we do not think that their use in the dissection of the brachial vein is a good idea. This vein is very thin and has multiple small branches, and to free it safely for transposition and prevent injury, a long incision that provides better exposure is superior.

With regard to flap necrosis from long incisions, as we mentioned in our note, care has to be taken not to undermine the incision. As long as flaps are avoided, the chance of skin necrosis is minimized. As a matter of fact, we have not seen this complication in either basilic or brachial vein transposition arteriovenous fistulas.

We agree that one should be selective in choosing the correct patient for this type of arteriovenous fistula creation. In patients with small veins, a synthetic arteriovenous graft may be the more optimal choice. Shemesh and Olsha are to be commended for such a high secondary patency rates in their arteriovenous grafts. In our institutions, however, the secondary patency rate has been in the 60% to 70% at 1 year, similar to that reported in the literature. We believe, therefore, that increasing the prevalence of autogenous fistula creation, as stated in the guidelines set forth by The National Kidney Foundation-Dialysis Outcomes Quality Initiative (NKF-DOQI) guidelines, should lead to an overall increased arteriovenous access patency, decreased costs, and decreased morbidity. The brachial vein is simply another conduit to consider in those without suitable superficial venous anatomy, such as cephalic or basilic veins, in the creation of native arteriovenous fistulas.

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## Regarding: "Stent-graft repair of traumatic thoracic aortic disruptions"

There have been various developments in recent years in the management of traumatic thoracic aortic disruptions. Endovascular stent grafting has emerged as an attractive option. Wellons et al (J Vasc Surg 2004;40:1095-100) experienced 10 patients with traumatic thoracic aortic disruptions between January 2003 and March 2004. One patient underwent open repair because of a short neck. The remaining nine patients received endoluminal stent-graft repair, with successful exclusion of the traumatic disruption. One patient died of cerebral injury. No patient had spinal

We have treated 21 patients with traumatic thoracic aortic disruptions during the last 50 months. Ten patients underwent endovascular stent grafting. One patient died of bilateral lung injuries. A change to open repair was made 14 days after the initial stent grafting in a 29-year-old patient because of migration. Follow-up computed tomography scans showed disappearance of aortic injuries in the remaining patients. No patient developed paraplegia. The immediate outcomes of endograft repair appear to

Wellons et al probably intended to apply this less invasive treatment to all patients with traumatic thoracic aortic disruptions during the study period. However, we disagree with their strategy. We believe that open repair should be performed in young patients without other serious associated injury, especially cerebral hemorrhage, for the following two reasons:

First, the early results for young patients in our series who underwent surgical intervention were excellent. Without other serious associated injuries, operative death was zero.

Second, stent-graft migration is a concern. In our patients, the sizes of prosthetic vascular grafts used in stent grafting were larger in elderly patients than in young patients. Thus, young patients may have dilation of the aorta as they get older and may experience stent migration in the late period. In addition, it is often difficult to follow up young patients after discharge. We have observed two graft migrations in 120 patients who had undergone endovascular stent grafting of the descending thoracic aorta. Both migrations occurred in young patients.

Considering these facts, durability of stent grafts for young patients is doubtful. Therefore, open repair should be the first choice of treatment for traumatic aortic injury in young patients without serious associated injury.

Traditionally, there were two methods for treating blunt traumatic aortic rupture: immediate surgical treatment and delayed surgical treatment. Endovascular stent grafting has been added to the conventional treatments. The management of acute aortic injury should be individualized according to the information from patients.