detected an intervention was performed. The patients treated by Turmel-Rodrigues were likely preselected and therefore experienced a higher percentage of anatomical abnormalities.

We agree that deeply located veins not accessible for cannulation are not suitable for radiological intervention, but should be surgically revised. However, we do not consider these patients to have immature fistulas, but cannulation problems. An adequate imaging of immature AVFs is of utmost importance for treatment planning. In all our patients angiography with retrograde filling of the radial artery was sufficiently accomplished in all. In fact, the anastomotic complex and outflow vein, at which side most stenoses appear, were excellently visualized. Thus, Turmel-Rodrigues may argue about misdiagnosis of stenosis, but this view is not supported by facts. In the same line as this observation, we cannot agree with the idea that all immature AVFs can be salvaged by interventional treatment. If there is no stenosis you simple cannot treat it. And we all know that in particular in diabetics or patients with peripheral sclerotic arteries, stiffness and non-compliance may hinder maturation.

Our policy in this prospective study was to treat anastomotic stenoses with surgery and outflow stenosis with PTA. It depends on local customs whether to operate or to intervene on anastomotic abnormalities and when considering this issue, many roads may lead to Rome. In patients with insufficient wrist vessels noticed during operation and in need of an alternative vascular access, it was not possible to obtain brachiocephalic AVFs, because of the poor suitability of the upper-arm cephalic vein. In these patients, prosthetic grafts were implanted, which could be cannulated within 3 weeks. Of course, we are aware of the international literature on native and prosthetic AVFs, which report different outcomes of both types of vascular accesses. We recently published on the use of prosthetic grafts with 1 year secondary patencies of 80–90% and these are really better than those reported by other authors.

It may be vital to obtain autogenous fistulas in all patients, but not at any price. Better shoot yourself in the foot, than cause sepsis in the patient, due to the central vein catheters necessary because of the lack of sufficient and matured vascular access.

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Use of methylene blue for diagnosis of leak in CAPD patients

Sir,
The case reported by Herbrig et al. [1] illustrates a very interesting teaching point. However, we have one objection to the initial method employed by the authors to demonstrate the leak. They have used methylene blue. This has been reported to be an irritant to the peritoneum, and would thus not be advisable to use it [2,3]. The estimation of glucose in the effusion with imaging by MRI would have sufficed to demonstrate the leak. In patients on peritoneal dialysis, every attempt should be made to preserve the peritoneum; avoiding exposure to methylene blue is one of them.

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Reply

Sir,
We appreciate the comment by Rao et al., who objected to methylene blue i.p. to demonstrate the peritoneo-pleural leak. The reason for their objection was fear of chemical peritonitis. We agree that a clearly elevated glucose concentration in the pleural effusion might have been sufficient to demonstrate the suspected leak. In this way we found a glucose concentration in the effusion of 22.5 mmol/l, when fresh dialysis solution had been instilled into the peritoneal cavity shortly before. It was during this particular exchange that we added the methylene blue to demonstrate its appearance in the pleural effusion. Thus, we proved the peritoneo-pleural leak twice, which was not strictly necessary. In this respect we fully agree with Rao et al.

However, we do not find sufficient indication for their statement that methylene blue is '... an irritant to the peritoneum ...', which is '... not advisable to use ...'. We searched the literature on this issue and we found only the two case reports that are also mentioned in the letter. In addition, methylene blue is used clinically for diagnostic procedures frequently without complications. These procedures are detection of enteric, bronchial or bladder fistulae, as well as chromopertubation in diagnostic laparoscopy [1–3]. Also, Hosoda et al. [4] diagnosed and successfully treated a pleuroperitoneal communication in a CAPD patient by video-assisted thoracoscopic surgery using methylene blue containing dialysis solution through the PD catheter. Taken together we do not agree with the statement by Rao et al. that i.p. methylene blue administration should in general be avoided in patients treated by peritoneal dialysis.

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