



Correspondence

Response to Commentary on ‘Factors Influencing Wound Healing of Critical Ischaemic Foot after Bypass Surgery: Is the Angiosome Important in Selecting Bypass Target Artery?’

Dear Editor,

We would like to thank the authors of the letter for their pertinent comments on our manuscript. We fully agree that CLI treatment cannot be accomplished by surgery alone and recognise the importance of postoperative care, including wound management and medication. In our manuscript, we emphasise that healing ischaemic wounds is not easy, even after successful revascularization, because of the impaired wound healing ability and impaired immune system of compromised patients, such as those with diabetes or end-stage renal disease (ESRD).

As mentioned in the manuscript, we employ negative pressure wound therapy (NPWT) for most deep wounds to facilitate granulation formation. NPWT is one of greatest advances in the field of wound management and may contribute to shortened ulcer healing time.¹ Conversely, hyperbaric oxygen therapy (HBO) is not used routinely in our institution because of its inaccessibility. Further randomised studies are required to evaluate whether HBO has benefits even in revascularised feet. To stimulate cell growth and accomplish complete epithelialisation, a recombinant fibroblast growth factor (FGF) spray was applied to most of patient wounds. Although, in this study, more than several months were required to heal ischaemic ulcers in patients with ESRD despite employing NPWT and the FGF spray, new bioengineered technologies for stimulating angiogenesis and new advanced wound healing technologies are expected.²

Currently, there is no clear recommendation for postoperative medication in CLI patients that is supported by strong evidence. A portion of our patients (25%) experienced critically low graft flow as a result of poor run-off. To improve the microcirculation and increase graft flow, those patients underwent a prostaglandin E₁ infusion through the vein graft. While all patients were postoperatively administered antiplatelet agents, cilostazole was selected to 38% of patients to prevent progressive vein graft intimal hyperplasia and life-threatening cardiovascular events.

Further basic and clinical studies are required to examine postoperative standard care and to improve wound healing and the QOL of CLI patients.

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Antegradely Performed TEVAR

We congratulate the authors for their work on the incidence of stroke in thoracic endovascular aortic replacement (TEVAR) due to arcus aorta aneurysms.¹ We wonder if TEVAR, performed in 32 patients in whom zone 0 was intervened, was performed in the same sitting with surgical intervention to ascending aorta. We would like to know how TEVAR was performed if TEVAR was carried out in the same session. That's because if TEVAR is performed in the same session as surgical procedure it can be done antegradely from ascending aorta rather than the retrograde technique in which femoral artery is utilized. In this technique a 8-mm graft is anastomosed to ascending aorta or the graft interposed to ascending aorta. TEVAR is performed antegradely with this 8-mm graft.² Performing this procedure by antegrade route provides such advantages as avoiding complications likely to develop in the iliofemoral artery used as the site of access during the procedure and ensuring sufficient length in order for the endograft deployment systems to reach the landing zones.^{2,3} Moreover, presence of shorter carrier systems in the antegrade approach will cause delivery of less rotational power, thus providing maximum precision in the placement of the graft. Another advantage is that antegrade approach permits manual manipulations of the endograft in order to fit it to a desired position in the aortic arch, thanks to the open sternum.^{2,3} Apart from that, there appears to be a risk of entering the false lumen in the femoral or iliac arteries upon using the retrograde route especially in dissection cases. Under the light of this knowledge we feel that it is essential to keep in mind that TEVAR can be antegradely done too, particularly in cases with thoracic aorta aneurysms where sternum is opened.

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followed the golden standard in this case and on this basis suggested how the diagnosis could be improved through further investigation.

In the second place, as far as we know, there are no guidelines about the use of post-processing software, therefore no legal issues are at stake in this case, and neither are ethical ones. Not only has no harm been done to the patient, but, more importantly, no harm could have been done.

Thirdly, there is growing literature in this field¹ about the great effectiveness of open source software as compared to the approved versions. Open source software is updated at a rate that exceeds by far that of software updates in the industry, which makes it a better and more reliable tool than the approved types.

Last but not least, it is the duty of the public service to adopt a resource with the best cost-effectiveness ratio. In this case the choice of software that is both open source and free of charge and that could guarantee the same, if not better, level of reliability than its approved and expensive version has been a responsible one, and should not be subject to criticism.

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Response to Commentary on 'The Wonders of New Available Post-analysis CT Software in the Hands of Vascular Surgeons'

With regard to the commentary on the article "The Wonders of New Available Post-analysis CT Software in the Hands of Vascular Surgeons" there are a few things we would like to highlight.

We agree with the authors that, before adopting post-processing software in clinical practice, some training is needed in order to prevent the misuse of such a delicate tool. We also agree with them that it should be mandatory to report the likelihood of a graft failure. We don't agree with them when they criticize the use of open source post-processing software, for the four reasons we give below.

First of all, we need to point out that the post-processing software has been used in order to further improve diagnosis, and not as the main instrument for primary clinical use. The authors

Reply to Letter Regarding the Comments on 'The Wonders of New Available Post-analysis CT Software in the Hands of Vascular Surgeons'

We feel obliged to reply to the letter regarding our previous comments on the use of open-source software for image post-processing, and explain our point of view some more. As we previously emphasized, post-processing software is very useful and can enhance insight in a patient's anatomy before and after endovascular aneurysm repair. In fact, detailed analysis using such technology may provide additional or alternative diagnoses and improve patient care. Naturally, a free software tool that can provide this added value is a great asset.