

LETTERS-TO-THE-EDITOR

Regarding “Glomerular filtration rate after left renal vein division and reconstruction during infrarenal aortic aneurysm repair”

We read with great interest the article by Marrocco-Trischitta et al¹ and would like to offer some comments. This article is particularly important in the present climate of endovascular aneurysm repair (EVAR). In our unit, fenestrated EVAR devices are not currently popular and therefore juxta-renal aneurysms tend to be repaired by open surgery. Although the article indicates that only 1.3% of the patients undergoing open AAA repair required left renal vein (LRV) division, we believe that the need to divide the LRV during open abdominal aortic aneurysm (AAA) repair is likely to rise in the future. Hence, it is important to know whether reconstruction of the LRV is truly necessary.

The article concludes that reconstruction of the left renal vein (LRV) following its division during open repair of infrarenal abdominal aortic aneurysms (AAA) restores preoperative renal functional status without increasing the complication rate or total operative time. In the absence of a control group (ie, LRV divided during surgery but not reconstructed), it is erroneous to conclude that the restoration of renal function was due to LRV reconstruction. In our experience, LRV division has not lead to a profound deterioration of renal function postoperatively as shown in our paper published in 2000.² We accept that calculated glomerular filtration rate (GFR) may be a more sensitive marker of renal dysfunction than serum creatinine and are in the process of repeating our audit of LRV division during AAA surgery using this tool.

Only patients undergoing elective AAA repair were included in the study. The need to divide the LRV may be more crucial in emergency repair of AAA. In these unstable patients, LRV reconstruction may add to the operative time and may increase morbidity. Therefore, the results should not be extended to emergency patients undergoing AAA repair, and these patients need to be studied independently.

Our practice is to divide the LRV beyond (to the right of) the union of the left suprarenal, left gonadal, and left lumbar renal veins thereby maintaining some collateral circulation. We believe that this is sufficient to preserve the venous return from the left kidney and restore renal function over time. Another important factor in determining postoperative renal function is renal thrash (ie, microemboli) due to the juxta-renal position of the aortic clamp.

These and several other factors need to be addressed before LRV reconstruction can be recommended as a safe, effective, and necessary step in open repair of AAA. A well-designed randomized controlled trial in emergency and elective patients is the way forward.

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REFERENCES

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Reply

The interest of Dr Elsharawy and coworkers for our article is much appreciated. Indeed, we believe that our conclusions, rather than erroneous, were based on straightforward results. We showed that left renal vein (LRV) reconstruction after its division: (1) is feasible without significantly lengthening operative time; (2) is not associated with increased complication rates; (3) is not associated with renal derangements since glomerular filtration rate remained unchanged as in patients in whom the LRV was left intact; and (4) appears to be durable. We did not address nor draw conclusions regarding the risks of LRV ligation that others have previously reported. Hence, a control group of patients in whom the LRV was divided but not reconstructed was not necessary. We showed that LRV reconstruction is safe and viable and therefore should not be regarded as cumbersome.

We agree that our results were obtained in an elective setting and therefore can not be extended to emergent abdominal aortic aneurysm repair. Yet, the fact that LRV reconstruction may increase perioperative morbidity is to be demonstrated. One can argue that it may not be necessary in all cases, but the occurrence of renal venous hypertension seems unpredictable, and we find it unnecessary to take the chance.

In conclusion, our study showed that the reconstitution of LRV anatomic continuity is safe and re-establishes a physiologic condition. Advocates of LRV ligation have the burden of the evidence to prove their case.

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Regarding “Endovenous laser treatment of the short saphenous vein: Efficacy and complications”

Although Gibson and associates have addressed an infrequently discussed subject—the small saphenous vein (SSV; not the short saphenous vein)—the article has omitted some important details.¹ This article did not adequately incorporate the Venous Reporting Standards, current anatomic terminology, or a valid outcome assessment, such as the Venous Severity Score. Outdated references to the “short” saphenous vein or “Giacomini vein” should no longer be used.² What they call the “CEAP classification” is only the C portion. There is no information on E (etiology) or A (anatomy). For P (physiology), obstruction was excluded, so that I presume all limbs had reflux.³

The absence of Venous Severity Scores, particularly the Venous Clinical Severity Score, limits the assessment of this therapy's efficacy. These disease specific-outcome measures were developed to assess the utility of interventions in patients with chronic venous insufficiency,⁴ while in this article we are left with only surrogate outcomes. Moreover, because the majority of patients had concomitant procedures to the great saphenous or perforating veins, the specific effect of SSV treatment is blurred.

Important details of diagnostic techniques and their criteria are absent, such as (1) the criteria for SSV reflux and the mean/median valve closure time, and (2) the criteria for perforator incompetence—reflux/diameter, or both. Because nearly 70% of the study population was class II and 136 limbs underwent perforator ligation, many of these perforators were in either class II or III. This is a relatively high