

## Coronary-subclavian steal syndrome in a hemodialysis patient with ipsilateral subclavian artery occlusion and contralateral vertebral artery stenosis “Case Report”

To the Editor,

I read the article written by Sağ et al. (1) entitled “Coronary-subclavian steal syndrome in a hemodialysis patient with ipsilateral subclavian artery occlusion and contralateral vertebral artery stenosis “Case Report”” published in *Anatol J Cardiol* 2016; 16: 542-6 with great interest.

It is well known that the use of left internal thoracic artery (LITA) for coronary artery revascularization has been associated with better long-term patency and patient survival than the use of a saphenous venous graft (2). On the other hand, patients with end-stage renal failure (ESRF) are under increased risk of coronary artery disease (3). Unfortunately, patients who need dialysis have been confronted with coronary-subclavian steal syndrome owing to left subclavian artery stenosis or ipsilateral upper extremity arterio-venous fistula (AVF) that gives rise to a low resistance vascular bed (4). Moreover, it is reported that the ipsilateral location of coronary artery bypass with the use of LITA and upper extremity AVF may be associated with an increased risk of cardiac events (5).

In the light of the points mentioned above, would you suggest the three results listed below?

1. In patients with ESRF having upper extremity AVF, ipsilateral LITA should not be used for coronary artery revascularization.
2. Ipsilateral upper extremity should be avoided for AVF if ipsilateral LITA is used for coronary artery revascularization.
3. If there is an obligation regarding the use of ipsilateral LITA, we should use ipsilateral LITA as a free graft rather than in situ.

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### References

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### Author's Reply

To the Editor,

We would like to thank the authors for their constructive comments to our article entitled “Coronary-subclavian steal syndrome in a hemodialysis patient with ipsilateral subclavian artery occlusion and contralateral vertebral artery stenosis “Case Report”” published in *Anatol J Cardiol* 2016; 16: 545-6 (1).

The use of left internal thoracic artery (ITA) grafts has clinical advantages in ESRD patients with respect to assuring a higher patency rate and avoiding the need to perform proximal aortic anastomosis. The prevalence of significant left subclavian artery and/or ITA stenosis in patients referred for coronary bypass surgery is reported to be 0.2%–6.8% (2). The prevalence in end-stage renal failure (ESRF) and hemodialysis patients appears to be higher because peripheral artery diseases coexist more frequently (3). Therefore, we strongly recommend preoperative evaluation of ITA and the subclavian artery in ESRF patients undergoing coronary artery bypass surgery. When ipsilateral subclavian artery stenosis is seen, stenting of the proximal subclavian artery stenosis may be performed in order to use ipsilateral ITA for grafting. Alternatively, contralateral ITA or free ITA grafts must be utilized. Finally, when possible, the placement an arteriovenous hemodialysis fistula in a patient with a functioning ITA graft would be better performed on the contralateral upper extremity.

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1. Sağ S, Nas ÖF, Bedir Ö, Baran İ, Güllülü S, Hakyemez B. Coronary-subclavian steal syndrome in a hemodialysis patient with ipsilateral subclavian artery occlusion and contralateral vertebral artery stenosis “Case Report”. *Anatol J Cardiol* 2016; 16: 545-6.