



ELSEVIER



INVITED COMMENTARY

Comments regarding 'Stent-assisted Remote Iliac Artery Endarterectomy: An Alternative Approach to Treating Combined External Iliac and Common Femoral Artery Disease'

F. Verzini*, P. De Rango

Unit of Vascular and Endovascular Surgery, Ospedale S. Maria della Misericordia, S. Andrea delle Fratte, 06156 Perugia, Italy

Extensive iliac disease involving common femoral artery (CFA) often manifests as a disabling condition and can be challenging to manage, especially in patients at high operative risk. In the last decades, "hybrid" techniques, combining endovascular and open procedures, have been increasingly used leaving little room for the classic open repair.

In this issue of *EJVES*, Simò et al. re-evaluated the technique of remote iliac endarterectomy, here named stent-assisted remote iliac endarterectomy (SA-RIEA), since routine stent fixation of the proximal transection intimal flap, after remote external iliac endarterectomy through a ring stripper, was applied.¹ The use in a large series of procedures ($n = 155$), one-third of which for totally occluded external iliac arteries ($n = 52$), supported the usefulness of the technique with 93.5% immediate success rate, reporting only two major amputations and one peri-operative death, and a primary patency of about 70% at 5 years.

Despite the safety and efficacy shown for this not-totally innovative technique,² management of concurrent extensive iliac and CFA disease remains an open issue.

A variety of other hybrid techniques have been successfully employed to treat iliac TASC D lesions, one of the oldest, simplest and most largely applied remaining iliac angioplasty/stenting plus CFA endarterectomy/patch plasty, with demonstrated similar or even better results than those of SA-REIA.^{3,4} Indeed, the need for plaque debulking at the level of large arteries, as the iliac, does not seem to add much to the simpler balloon angioplasty technique in terms of immediate success or long-term patency rate, and new stents and, eventually, stent grafts have been successfully used for long-segment iliac occlusions. However, reports on hybrid or endovascular procedures to treat such complex vascular diseases are difficult to compare because they usually include a variety of clinical presentations, timing, techniques of endovascular or open procedures and different terminology.

The applicability of SA-RIEA remains unclear: exclusion criteria for the technique are represented by heavily calcified external iliac involvement, bilateral iliac disease or the presence of extensive chronic common iliac artery occlusions. Moreover, very tortuous iliac arteries, as well as those previously treated by balloon and/or stent, have been considered at high risk of failure in previous reports. Since all these are usually very common findings in patients with aorto-iliac diseases associated with CFA involvement, SA-RIEA may not be for the most. Indeed, for bilateral iliac obstruction, an additional femoro-femoral crossover bypass was advocated by Simò et al. therefore losing one of the theoretical advantages of SA-RIEA consisting in the avoidance of prosthetic material.

DOI of original article: 10.1016/j.ejvs.2011.06.005.

* Corresponding author. Tel.: +39 075 5786436; fax: +39 075 5786435.

E-mail addresses: fverzini@unipg.it, fabio.verzini@gmail.com (F. Verzini).

The large experience of this group of authors with the SA-REIA casts doubts on the generalisability of the procedure: similar safety and efficacy results might not be easily obtainable in other settings without an appropriate learning curve, as shown also in the first period of the authors' experience.

Finally, a common drawback of studies addressing endovascular or hybrid techniques for peripheral vascular disease is the unavailability of long-term results. The durability of SA-RIAE shown by Simò et al. is affected by a median follow-up of less than 2 years (21 months) with few numbers of patients reaching 5-year follow-up.

As of today, there is no gold standard for safe and effective management of extensive aorto-iliac-femoral disease. Any innovative or refurbished technique is a valuable tool to be cautiously used, to tailor the best treatment to the single patient anatomy.

References

- 1 Simó G, Banga P, Darabos G, Mogán I. Stent-assisted remote iliac artery endarterectomy: an alternative approach to treating combined external iliac and common femoral artery disease. *Eur J Vasc Endovasc Surg* 2011;**42**:648–55.
- 2 Martin JD, Hupp JA, Peeler MO, Warble PB. Remote endarterectomy: lessons learned after more than 100 cases. *J Vasc Surg* 2006;**43**(2):320–6.
- 3 Piazza M, Ricotta 2nd JJ, Bower TC, Kalra M, Duncan AA, Cha S, et al. Iliac artery stenting combined with open femoral endarterectomy is as effective as open surgical reconstruction for severe iliac and common femoral occlusive disease. *J Vasc Surg*; 2011 Apr 29 [Epub ahead of print].
- 4 Kashyap VS, Pavkov ML, Bena JF, Sarac TP, O'Hara PJ, Lyden SP, et al. The management of severe aortoiliac occlusive disease: endovascular therapy rivals open reconstruction. *J Vasc Surg* 2008;**48**:1451–7.