

Subtent Anchor Technique for Recanalisation of a Full Metal Jacket Femoropopliteal Occlusion: An Unconventional Road to Rome

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In the current issue of *European Journal of Vascular and Endovascular Surgery Short Reports* Testi *et al.* present an unconventional way to recanalise a chronic total occlusion (CTO) of a previously full metal jacket (FMJ) stented femoropopliteal arterial segment.¹ With the rapid expanding endovascular armamentarium the number of complex atherosclerotic lesions will increase significantly and patients, such as those presented in the case of Testi *et al.*, will be encountered more frequently in daily vascular surgery clinical practice.

While the technical success rates and short-term results of FMJ of the femoropopliteal arteries are good, it goes hand in hand with a significant need for re-interventions compared with shorter lesions (<20 cm), with one and two year re-intervention rates triple that of shorter lesions.² Furthermore, it is generally accepted that in-stent restenoses are different entities to primary lesions and require a different approach, with a lower success rate and increased need for further re-interventions.³

These statistics underline the fact that careful consideration of FMJ of the femoropopliteal arteries is mandatory and that (endovascular) interventions in the case of restenosis or re-occlusion need consideration and reconsideration. However, in a case such as that presented by Testi *et al.*, most interventionalists would opt for a primary endovascular approach. Bearing the angiographic pictures of the case in mind, without a clear origin of the superficial femoral artery recognised, an antegrade approach is expected to be hard and a retrograde approach will probably be easier, because the distal cap is often softer.⁴

Testi *et al.* successfully attempted retrograde recanalisation of a FMJ stented CTO with access directly below the

occlusion in order to prevent damage to more distal landing zones, which is technically challenging. They very creatively succeeded in this approach by using the described subtent anchoring technique. The technical issues encountered when recanalizing a CTO have led to a considerable number of crossing devices for CTOs, all with their pros and cons.³ The important benefits of the method presented are that it can be performed with catheters and guidewires that are available in most interventional units and does not require expensive crossing devices. Until appropriate crossing devices are widely available and their added value is supported by future evidence, methods such as those presented in this case can be of great help in specific and complex CTO cases and may provide new roads to Rome.

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DOI of original article: <https://doi.org/10.1016/j.ejvssr.2018.08.005>

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<https://doi.org/10.1016/j.ejvssr.2018.10.004>