INVITED COMMENTARY

Comment on: Below-Knee Bare Nitinol Stent Placement in High-risk Patients with Critical Limb Ischemia and Unlimited Supragenicular Inflow as Treatment of Choice “K.P. Donas, A. Schwindt, T. Schöenefeld, J. Tessarek, G. Torsello”

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Donas et al. have reported their 3-year experience of using a single type of Nitinol self expanding stent in the below knee arteries. Whilst this is an uncontrolled retrospective study, their findings raise a number of interesting issues in relation to the use and future directions of stents in this particular region. It seems highly likely that these issues will be pertinent to routine practice, given the increasing significance of small vessel disease, particularly in the expanding population of diabetic patients.

The first issue that is raised is reflected in only 34 patients treated in a 3-year period. This equates to approximately 1 patient per month. With such excellent results, it would be expected that more patients will be considered for such treatment. It seems likely that most vascular departments will encounter an increasing number of such patients.

In common with many lower limb studies, this treatment group is rather heterogeneous. They treated a mixture of complex lesions for which stents were primarily placed, although the majority of patients included were being treated for less complex lesions, but their angioplasty was considered to have primarily failed (recoil or dissection).

This raises the question of exactly how to decide when to judge an angioplasty to be a failure. Subintimal angioplasty deliberately raises a dissection flap, however very good limb salvage rates are reported for this technique, without recourse to stents.1 The circumstances described by these authors are highly reminiscent of the early days of coronary stenting. How often do we hear now of coronary angioplasty without the use of a stent?

The study does show that once the stent delivery system has been positioned, the chances of achieving a good technical result is very high, and that (assuming that the additional in-flow procedure has been equally successful) then a significant rise in ABPI (or tissue perfusion) can be expected.

One of the limitations of this study is the relatively short follow up data. As stenting can be expected to give a superior primary result compared with angioplasty, restenosis may simply not yet be evident. Longer term patency data may be quite different.

From a technical perspective it is interesting that the authors chose to perform diagnostic angiography from the contralateral side, and then proceed from this to crossover. 8 of 34 patients then had a second (ipsilateral) access. When treating such patients pre-procedural imaging strategies, including non invasive angiography (MRA/CTA) have...
a number of benefits for patients in planning the procedure, as well as reducing iodinated contrast loads.

This paper is therefore thought provoking both for its content, and for the issues around managing these patients. The discussion indicates that the present data available is very limited in both quantity and quality. This is an area in which we need more information.

Reference