

USE OF A LOW-PROFILE STENT IN ATHEROSCLEROTIC ILIAC ARTERY DISEASE: THE RESULTS OF 4-FIRST (4-French Iliac Revascularization with low-profile Stent Technology) REGISTRY

Nicola Troisi, Emiliano Chisci, Leonardo Ercolini, Pierfrancesco Frosini, Eugenio Romano, Enrico Barbanti, Filippo Turini, Clara Pigozzi, Stefano Michelagnoli
Department of Surgery, Vascular and Endovascular Surgery Unit, San Giovanni di Dio Hospital, Florence, Italy

AIM

To evaluate the 4-year outcomes of low-profile stents designed for infrainguinal vessels in the revascularization of atherosclerotic iliac artery disease.

METHODS

- ✓ Between January 2009 and December 2015 82 low-profile stents (Astron® Pulsar and Pulsar-18; Biotronik AG, Bülach, Switzerland) in 63 patients were implanted in our Center.
- ✓ All data concerning these stents was prospectively collected in a dedicated database: the 4-FIRST (4-French Iliac Revascularization with low-profile Stent Technology) registry.
- ✓ Early and 4-year outcomes have been evaluated in terms of morbidity, mortality, primary patency, primary assisted patency, secondary patency, absence of target lesion restenosis (TLR), healing of the lesions/relief of symptoms, and limb salvage.

RESULTS

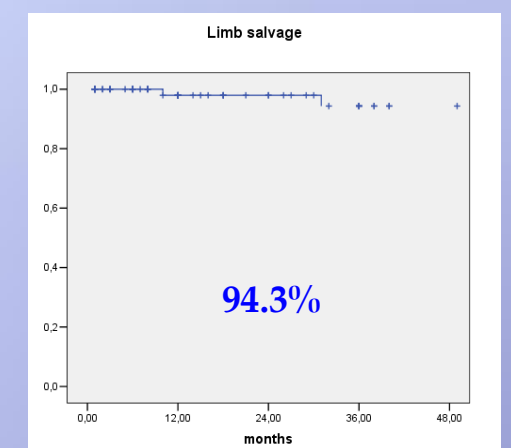
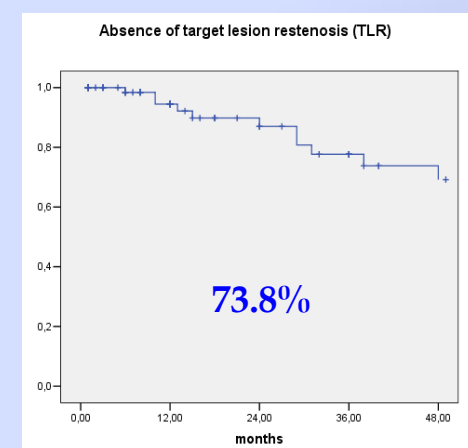
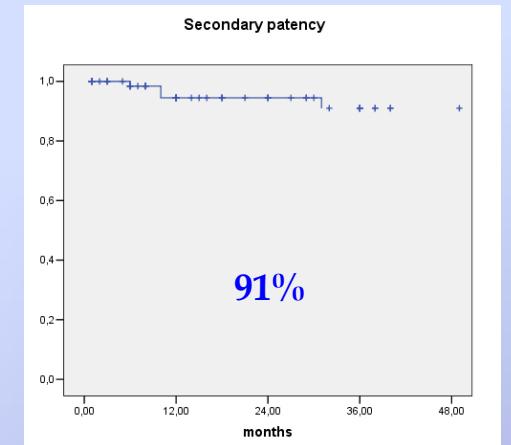
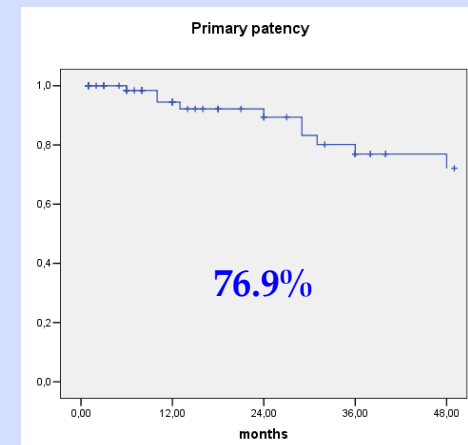
- ✓ The patients were predominantly males (42/63, 66.7%) with a mean age of 69.3 years (range 45-88).
- ✓ In 40/63 cases (63.5%) patients had a critical limb ischemia.
- ✓ Mean duration of follow-up was 24.1 months (range 1-72).



ASTRON® PULSAR
71 (86.6%)



PULSAR-18
11 (13.4%)



CONCLUSIONS

Use of a low-profile 4-F stent in atherosclerotic iliac lesions is safe and effective. At 4 years, the overall patency and the absence of TLR could be considered acceptable. The use of stents with a diameter ≥ 6 mm and post-stent balloon dilatation should always be recommended.

REFERENCES

1. Bosiers M, et al. 4-French-compatible endovascular material is safe and effective in the treatment of femoropopliteal occlusive disease: results of the 4-EVER trial. J Endovasc Ther 2013;20:746-56.