Endovascular treatment versus femoropopliteal bypass surgery outcomes for TASC II C lesions of the superficial femoral artery

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Introduction
Revascularization is mandatory for patients with severe claudication and critical limb ischemia. Femoropopliteal lesions and Revascularization were classified in the Trans-Atlantic Inter-Society Consensus II (TASC II) guidelines. In the TASC II classification, there are strong recommendations for TASC II A, B and D lesions. However, the existing data comparing the endovascular treatment (ET) to the femoropopliteal artery bypass (FPB), especially on the TASC II C femoropopliteal lesions, are not sufficient. In this study we aim to compare the outcomes of ET and FPB in patients with TASC II C femoropopliteal lesions.

Methods
This retrospective, single-center study included a total of 149 patients with symptomatic TASC II C femoropopliteal lesions. Of these, 46 patients were treated with ET and 103 were treated with FPB between January 2012 and January 2017. The primary outcome measures were primary and secondary patency.

Results
The mean length of the lesions was 23.9±5.3cm in the ET group and 25.5±4.6cm in the FPB group (p=0.07). The primary success rates for ET and FPB were both 100%, and early revascularization was not necessary for any patient. Primary patency at 6, 12, 18 and 24 months was 97.8%, 93.5%, 87% and 84.8%, respectively, and 96.1%, 90.3%, 81.6 and 79.6%, respectively, for the FPB group (p=0.41).

Conclusion
ET is a safe and more cost-effective choice of treatment than FPB with similar primary and secondary patency rates in TASC II C patients.

Secondary patency rates for ET at 6, 12, 18 and 24 months were 97.8%, 93.5%, 87% and 84.8%, respectively, and 96.1%, 90.3%, 81.6 and 79.6%, respectively, for the FPB group (p=0.41).

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