

Results of revascularisation long steno-obstructive lesions of the femoropopliteal artery (TASC II C, D) by wire-interwoven nitinol biomimetic stent Supera

Gostev A.A., Osipova O.S., Karpenko A.A.

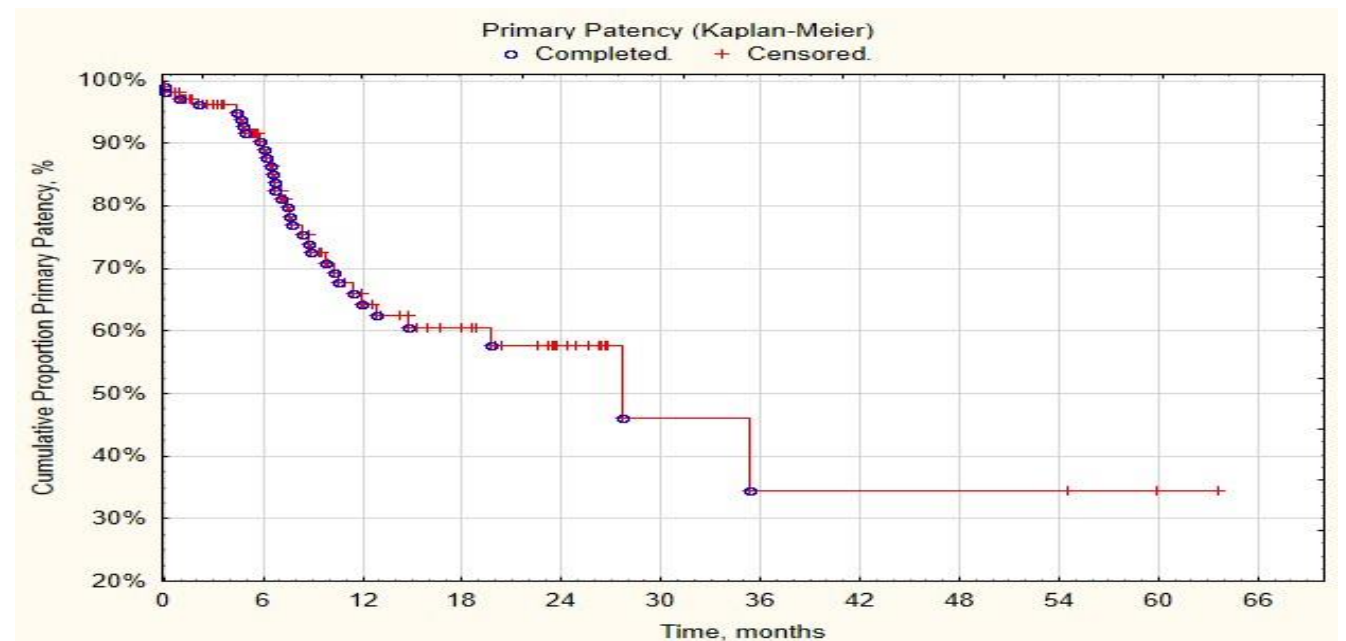
Objective: To present the long-term results of Supera stenting of long steno-obstructive lesions of the superficial femoral or proximal popliteal (femoropopliteal) artery (TASC II C, D).

Methods: This prospective, single-center, single-arm trial enrolled 108 patients with symptomatic peripheral artery disease undergoing Supera stenting of de novo long lesions of the femoropopliteal segment (TASC II C, D). Data are presented as a median with interquartile range, the quality data are represents as a percentage.

Results: 65% of patients had moderate to severe claudication, 35% of patients had critical limb ischemia as the indication for intervention. The total occlusion were in 75% patients. The median of follow-up period was 18 [8; 27] months. The lesions lengths was 150 mm [120;250]. Procedure success was achieved in 99% of procedures. The complication rate of short-term postoperative period was 9,2%. Freedom from target lesion revascularisation at 30-days postprosedure period was achieved in 96,3% patients. Clinical assessment, demonstrated improvement by at least 1 Rutherford category in 72% of patient. Complete healing of chronic ulcers was achieved in 56% of patient. Primary patency was 70,5%. Secondary patency was 83,3%. Limb salvage was 95,4%. The overall survival was 96,3%.

Table 1. Results

complication rate (postoperative period), %	9,2
freedom from TLR (30-days PO period), %	96,3
improvement by at least 1 Rutherford category, %	72
complete healing of chronic ulcers, %	56
primary patency, %	70,5
secondary patency, %	83,3
limb salvage, %	95,4
survival, %	96,3



Number of patients	108	73	40	24	17	4	4	3	3	2	1
Primary patency,%	92,6	75,9	73,1	72,2	71,3	71,3	70,5	70,5	70,5	70,5	70,5

Figure 1. Cumulative proportion Primary Patency (Kaplan-Meier)

Conclusion: Revascularisation with Supera stenting in patients with long steno-obstructive lesions of femoropopliteal artery achieved good clinical and patency results. Larger multicenter studies are needed to validate the safety and efficacy of this approach.