

2-years results of a pilot prospective randomized study of the effect of dissection of the lamina vastoadductoria after stenting of the superficial femoral artery on the incidence of restenosis in TASC-II D lesions.

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Objective:

To improve the results of stenting of the superficial femoral artery by eliminating compression of the distal segment of SFA in the Hunter's channel.

Study design

patients with TASC-II D SFA lesions

Stratification

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graph TD; A[patients with TASC-II D SFA lesions] --> B[Stratification]; B --> C[Group 1  
n=35]; B --> D[Group 2  
n=35]; C --> E[stenting of the superficial femoral artery]; D --> F[stenting of the superficial femoral artery, supplemented by the dissection of the lamina vastoadductoria];
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Group 1
n=35

stenting of the
superficial femoral
artery

Group 2
n=35

stenting of the
superficial femoral
artery, supplemented
by the dissection of the
lamina
vastoadductoria

Endpoints:

- **Primary endpoint:** patency of the vessel, which is defined as the absence of binary restenosis and reocclusions (ultrasound scan, CT-angiography).
- **Secondary endpoint:** the success of the procedure, limb salvage, the secondary patency of the operated segment, and intraoperative complications.

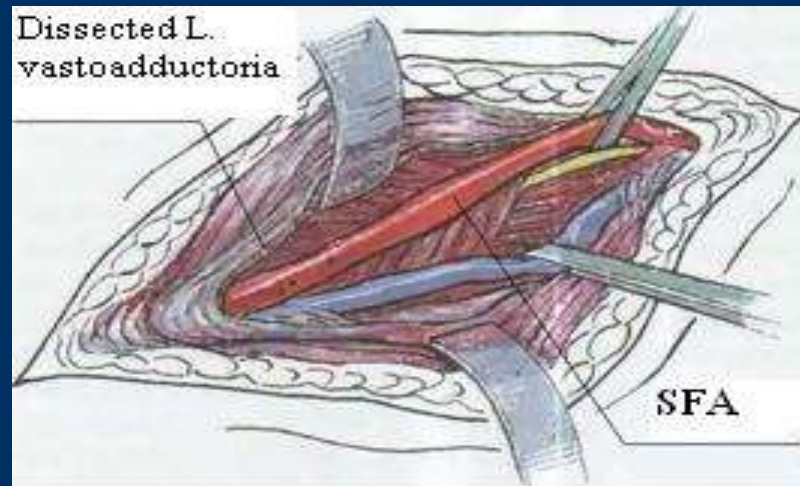
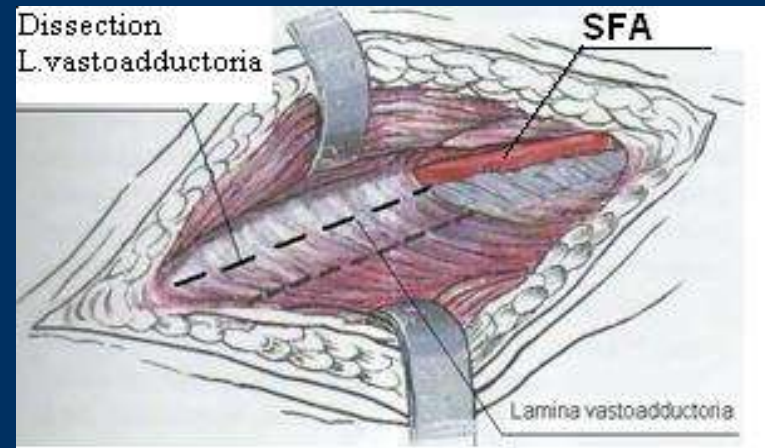
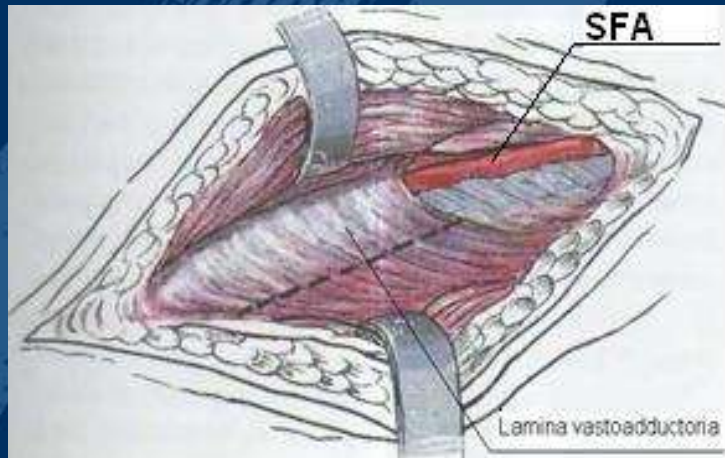
Characteristics of patients

	Group 1	Group 2	P-value
	(n = 35)	(n = 35)	
Sex M/F	25/10	24/11	n/a
Mean age (\pmSD)	65 \pm 6.62	66.7 \pm 9.39	0.256
Mean ABI (\pmSD)	0.49 \pm 0.114	0.51 \pm 0.096	1.0
Hypertension	31 (89%)	32 (91%)	0.671
Dyslipidemia	14 (40%)	20 (57%)	0.396
Smoking	17 (49%)	22 (63%)	0.393
Chronic renal failure	13 (37%)	8 (23%)	0.196
Diabetes mellitus	13 (37%)	6 (17%)	0.538

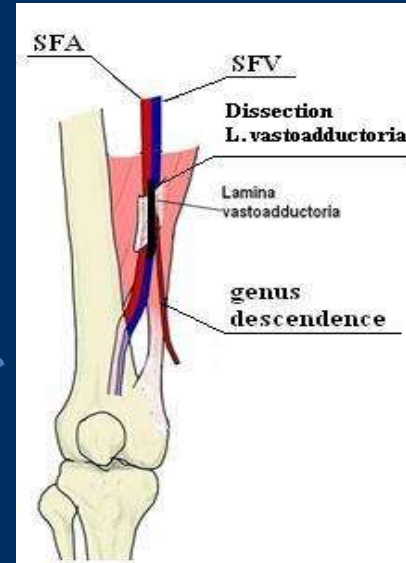
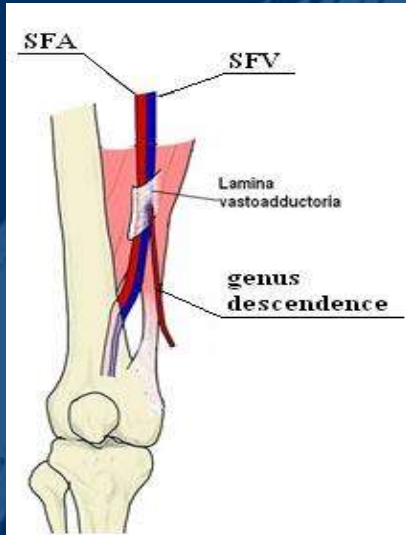
Characteristics of patients

Limb ischemia (Rutherford), St	Group 1	Group 2	P-value	Characteristics of arterial vessel		
				Group 1	Group 2	
3	29 (83%)	25 (71%)	0,32	Stenosis/occlusion	12/23	10/25
4	4 (11%)	7 (20%)	0,41	The mean artery diameter	5.0±0,81 (mm)	4.73±0.76 (mm)
5	1 (3%)	3 (9%)	0,61	The average length of stenting segment	22.92±5.62 cm	21.2±5.42 cm
6	1 (3%)	0	1			

Dissection of the lamina vastoadductoria



Dissection of the lamina vastoadductoria

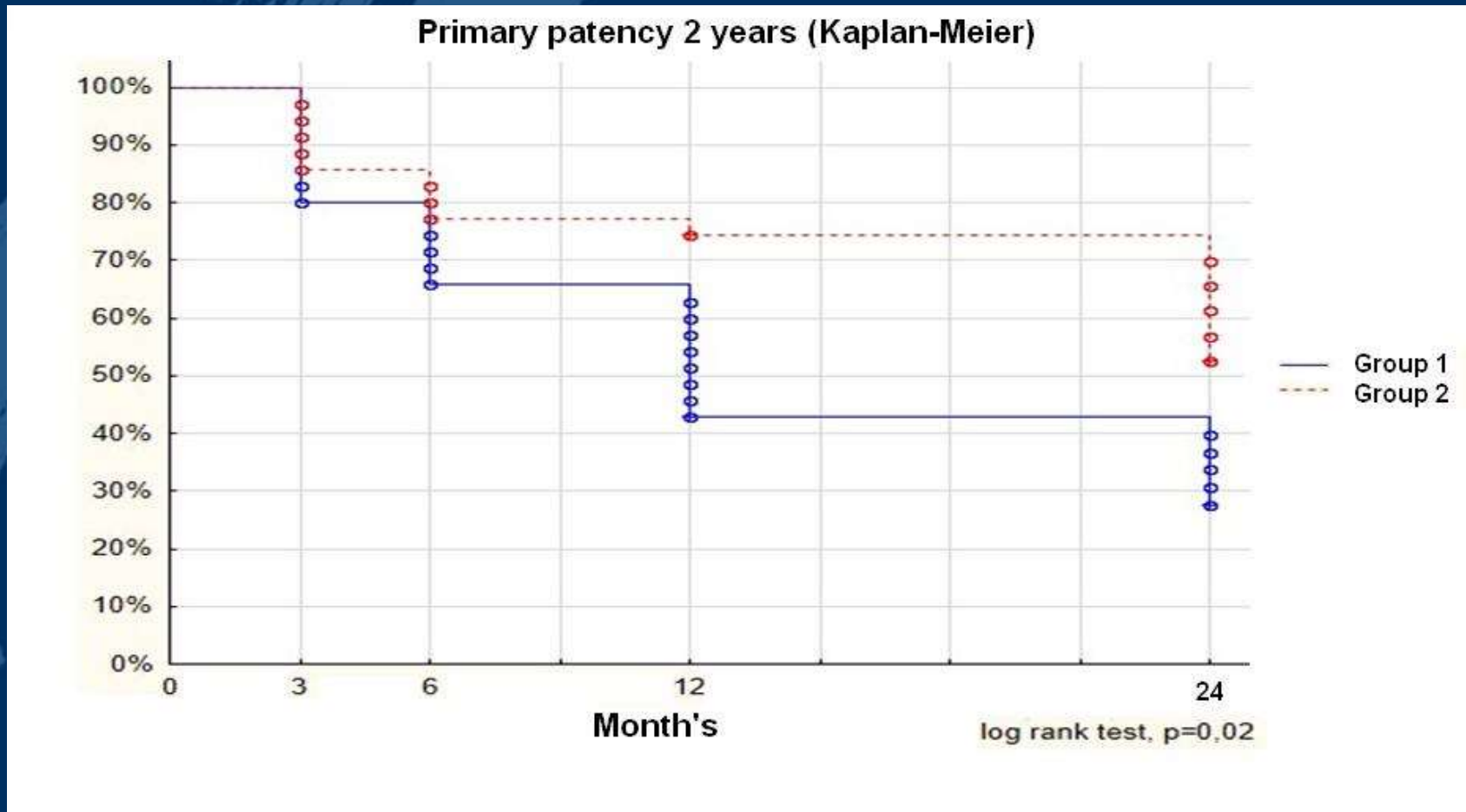


Results

- The procedure was 100% successful in both groups
- No intraoperative complications in both groups
- No lethal outcome in both groups
- One amputation was performed in each group

Results

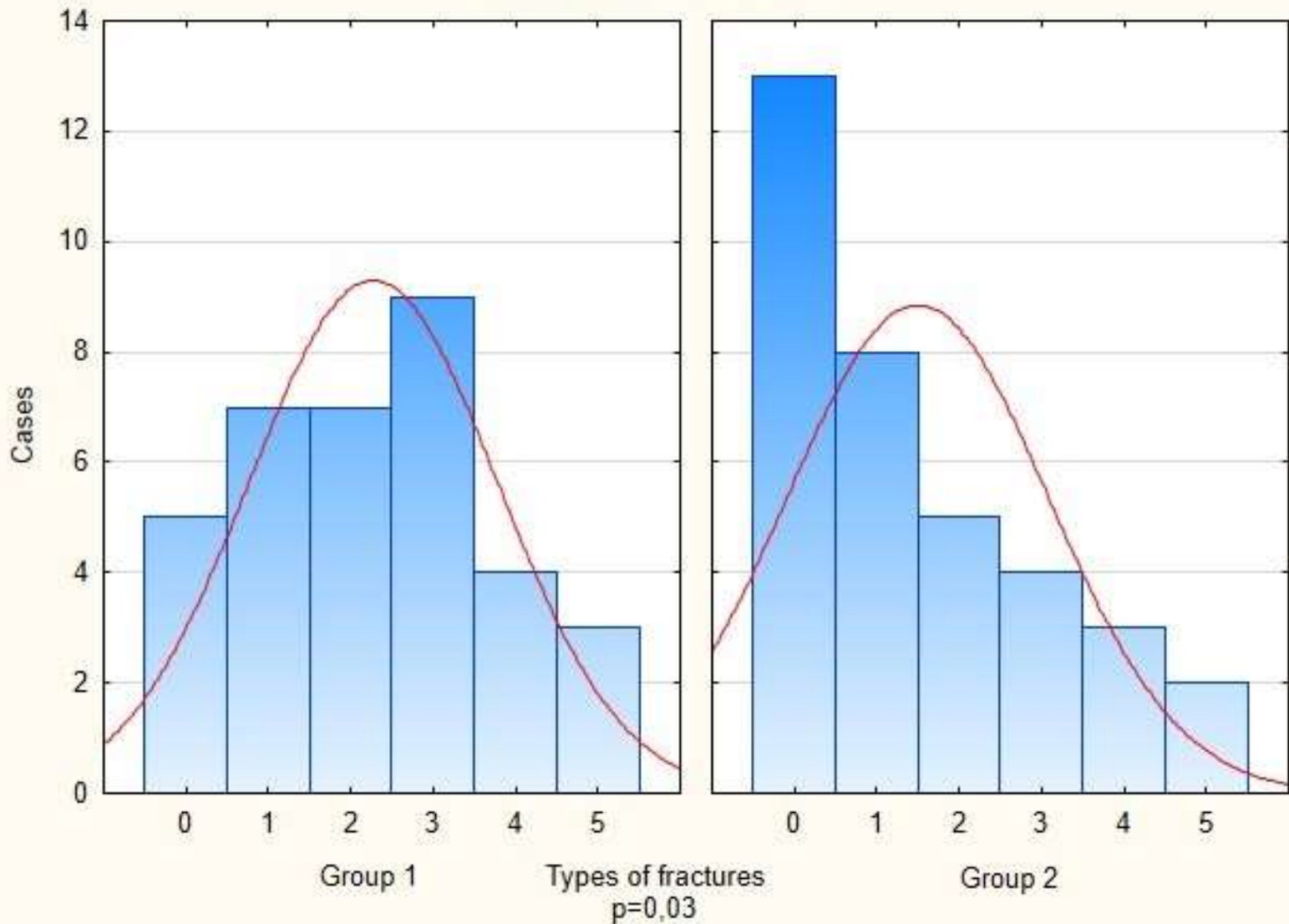
The observation period was 24 months



- Primary patency in group 1 was 28.5% (10 of 35)
- Primary patency in group 2 was 60% (21 of 35)

Results

Types of fractures in groups



Conclusions

- Dissection of the lamina vastoadductoria after stenting of the superficial femoral artery is safe and does not lead to limitation of limb function.
- The change in the biomechanical properties of the distal segment of SFA contributes to the improvement of primary patency in stenting of extended lesions of the superficial femoral artery.
- The tearing of the lamina vastoadductoria reduces the frequency and severity of stent fractures at the superficial femoral artery.



Thank you for your attention !

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