



PERCUTANEOUS RECANALIZATION OF VERY LONG FEMORO-POPLITEAL CHRONIC TOTAL OCCLUSION

SINGLE CENTER PROSPECTIVE STUDY

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INTRODUCTION

- Endovascular therapy = gold standard for "simple" femoro-popliteal arterial occlusive disease (angioplasty +/- stenting)
- Calcification ++ or very long ones = challenge (Surgery...)

→ BUT new endovascular techniques !!

→ Our experience: percutaneous recanalization of very long femoro-popliteal chronic total occlusions (> than 20 cm)

Rooke TW, Hirsch AT, Misra S, et al. . 2011 ACCF/AHA Focused update of the guideline for the management of patients with peripheral artery disease (updating the 2005 guideline): A Report of the American College of Cardiology Foundation/American Heart Association Task Force on Practice Guidelines - Developed in Collaboration with the Society for Cardiovascula Angiography and Interventions, Society of Interventional Radiology. J Vasc Surg 2011;54:e32-58.

MATERIAL AND METHODS

- January 2021 → April 2022
- N = 34 patients
- prospective review

• End point: primary patency rate



- 34 patients (36 limbs: 15L and 21R)
- 14 women (2 bilateral occlusions) and 20 men
- 64 years old (SD +/- 8,2 years)
 - Min 55 years old
 - Max 95 years old

RISK FACTORS

	HYPERTENSION	TOBACCO	DYSLIPIDEMIA	DIABETES
+	28	29	25	16
-	6	5	9	18

→ hypertension: 77,7 %

→ smoking: 80,5%

→ Diabetes: 44,4 %

→ dylipidemia:: 69,4 %

PREOPERATIVELY

RUTHERFORD 0	RUTHERFORD I	RUTHERFORD II	RUTHERFORD III	RUTHERFORD IV	RUTHERFORD V	RUTHERFORD VI
0	0	16	10	2	8	0

mean preoperative ABI was 0,53 (MAX 0,8 and MIN 0,25)

- Mean length of occlusive lesion was 29.22 cm
 - MAX 50 cm
 - MIN 20 cm
- 21 Controlateral and 15 ipsilateral punctures
- 6 retrograde punctures
- predilatations (plain old balloon angioplasty POBA)
- Technical success rate 100%



• ANGIOPLASTY/STENTING

4 PRIMARY STENTINGS	32 ANGIOPLASTY with DCB
4 drug coated stents	32 DCB alone
	18 BAILOUT STENTING
	- 11 dissections
	- 7 Recoils

- Mean follow up = 4 months
- no death
- 2 minor amputations
- Primary patency rate 76%
- 9 reocclusions
 - 5 target lesion revascularizations (13%)
 - Mean time for reocclusion = 130 days (Max 307 d, Min 2 d)



RUTHERFORD 0	RUTHERFORD I	RUTHERFORD II	RUTHERFORD III	RUTHERFORD IV	RUTHERFORD V	RUTHERFORD VI
20	2	2	0	0	1	0

11 NA...

mean postoperative ABI was 0,85 (MAX 1,2 and MIN 0,29)

mean preoperative ABI was 0,53

CONCLUSIONS

- Percutaneous recanalization of very long femoro-popliteal chronic total occlusions is safe.
- Despite primary patency rate is good, vessel preparation has to be optimized to enhance it.
- Longer follow up is required.



