Optimal Endovascular Technique or Extremely Calcified Femoropopliteal Lesions: Advantages and Precautions: from the CRACK and PAVE Registry

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Residual Stenosis after Nitinol-Stent Implantation is associated with higher restenosis-rate

- 118 SFA-CTOs treated with Nitinol-stents
- 43% had residual stenosis > 30%


How to treat extreme calcification?

- Atherectomy?
- Standard nitinol-stent?
- Interwoven nitinol-stent?

Severe Calcification: a case for a Supera-stent

After 5mm ballooning

Supera-Implantation in Severe Ca+ can be problematic

6.0/40mm VascuTrak at 22 atm.

Supera-failure

Disclosure

Speaker name: Andrej Schmidt
I have the following potential conflicts of interest to report:

Consulting / speaker honorarium:
Abbott, C.R.Bard, Cook, Cordis, Medtronic,
ReFlow Medical, Upstream Peripheral
Crack-and-Pave Technique for Extremely Calcified Femoropopliteal Lesions

Consequent / sufficient vessel-preparation may lead to perforation

'Crack and Pave' - Technique

After implantation of a Viabahn 7/150 further post-dilatation with 7mm high-pressure balloon (Conquest).

Recoil of the Viabahn

Viabahn-implantation and
high-pressure - or
over-size balloon - angioplasty

Aggressive Predilatation in Calcified Lesions

7.0/40mm-balloon 24 atm.
Relining with Supera-stents

CRACK & PAVE – Technique
Leipzig Registry

Neto-Diaz M et al, JEVT 2018

• N = 66, 54 men, (71.4±8.5 years)
• Mean lesion length: 26.9 ±11.2 cm
• TASC D 77.6% & TASC C 32.4 %
• 92.4% total occlusion

CRACK & PAVE – Technique
Leipzig Registry – 1° & 2° Patency

Neto-Diaz M et al, JEVT 2018

Viabahn | Supera (inner diameter)
---------|---------------------
5.0      | 3                   | 48
6.0      | 51                  | 51
7.0      | 42                  | 2
8.0      | 5                   |

Device-diameter

Procedural success: 100 %
Technical Success: 98.5 %
(1 case with residual stenosis > 30%)