What does it need to perform endovenous recanalization in chronic occlusions successfully
Lessons learned

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Disclosure

I have the following potential conflicts of interest to report:

- Receipt of grants/research support
  
  Medtronic, Cook, Optimed, BARD, Ab medica

- Receipt of honoraria and travel support
  
  Ab medica, Optimed, BARD, Medtronic, Cook, Bentley

- Participation in a company sponsored speakers’ bureau

- Employment in industry

- Shareholder in a healthcare company

- Owner of a healthcare company

- I do not have any potential conflict of interest
Indication

• Symptomatic obstruction in ilio-femoral and caval level
• Involvement of CFV > Endophlebectomy
contraindication

• severely impaired inflow due to involvement of FV and DFV
  (trabeculation in FV and DFV)
Diagnostic

- preoperative
  - Duplex
  - MR-Phlebography
  - CT-Phlebography

- perioperative
  - asc. Phlebography
  - IVUS

- postoperative
  - Duplex
  - X-Ray
impaired inflow from fem. v.

good inflow from deep fem. v.
IVUS showing May Thurner Point (MTP)  

IVUS after implantation of a 16 mm Venovo Stent
Area before stenting in MTP = 31.5 mm²

Area after stenting = 166 mm²
Diagnostic

- right CIA
- IVC
- Stent in left CIV

[Image of an ultrasound scan with labeled structures]
Procedure
Need for endophlebectomy

• Involvement of the CFV covering the ostium of DFV
Endophlebectomy of CFV

G. saphenous vein

Intravasal trabeculae

Ing. lig.
Endophlebectomy of CFV
Visualization of Cava Confluence
Geometry of stent

Non alignment

Compression

Tapering
Dedicated venous stents respect the venous anatomy
Non dedicated venous stent

venous stents
Proper use of the stents

Stent collision

Candy plug at distal end of the stent

Impossible to traverse the stent failure
Take home message

- Strict indication (important: Inflow !!!)
- Right diagnostic tools (Duplex, MR-Phlebo, IVUS)!!
- Endophlebectomy of CFV if needed
- Use dedicated venous stents in a proper way
- Agressive anticoagulation regime
- Rigid follow up !!!
Thank you for your attention

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