Disclosure

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

- Consulting
- Employment in industry
- Stockholder of a healthcare company
- Owner of a healthcare company
- Other(s)

I do not have any potential conflict of interest
What patients and what lesions do we treat?

Multilevel peripheral arterial occlusive disease involving the common femoral artery with Critical limb ischemia and high cardiovascular and pulmonary risk factors
Hybrid Techniques

Minimal surgery + Angioplasty (inflow/outflow)
Hybrid Techniques

CFA endarterectomy
+ inflow angioplasty
+ outflow angioplasty

Femoral-femoral Bypass
Femoro-popliteal Bypass
1. Classical Hybrid case: Occlusion of CFA, central PFA and SFA

- 63 y/o male Pt.
- CLI on the right side (non-healing calf ulcer), PAD Rutherford 5 on the right side
- Multiple cardio-vascular risk factors
- COPD Gold III
1. Classical Hybrid case: Occlusion of CFA, central PFA and SFA

- dedicated endovascular suite
- both groins sterile prepared
1. Classical Hybrid case:
Occlusion of CFA, central PFA and SFA

- dedicated endovascular suite
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Endarterectomy of right CFA PF and short segment SFA closure with bovine patch
Angiography

Occlusion of CFA and central PFA

Occlusion of SFA
Cross-over access to the right SFA crossing the lesion with 0.018” PT2 wire/multipurpose catheter

PTA of SFA and Implantation 6/60 Nitinol Stent
Final Result
2. CFA endarterectomy + Aorto-iliac angioplasty with bifurcated Endograft

- 82 y/o male Pt.
- CLI Rutherford 4 on the left side
- Multiple cardio-vascular risk factors

Chronic Occlusion of left CIA,EIA,CFA
2. CFA endarterectomy + Aorto-iliac angioplasty with bifurcated Endograft

Retrograde access through the Patch to the left EIA after TEA (0.035” Terumo Stiff wire/multipurpose catheter)

Post Balloon dilatation (Admiral 9/40mm)

Endograft at the level of the renal arteries
2. CFA endarterectomy + Aorto-iliac angioplasty with bifurcated Endograft

Kissing Stent of the aortic bifurcation

Final Result
3. CFA endarterectomy + iliac angioplasty + EVAR

- 56 y/o male Pt.
- PAOD Rutherford 3 on the left side
- AAA, Ø - 55 mm
- Multiple cardio-vascular risk factors
3. CFA endarterectomy + iliac angioplasty + EVAR

Cross-over access to the left EIA (0.035” Terumo Stiff wire/ multipurpose catheter) after CFA-TEA and pre-dilation

CFA post TEA

Endograft at the level of the renal arteries
3. CFA endarterectomy + iliac angioplasty + EVAR

Final Result
4. CFA endarterectomy + SFA Angioplasty

- 44 y/o male Pt.
- CLI on the right side (non-healing calf ulcer)
- Multiple cardio-vascular risk factors

Chronic Occlusion of right CFA and SFA
4. CFA endarterectomy + SFA Angioplasty

Final Result

Puncture of the patch in the CFA after CFA-TEA and antegrade access to the right SFA
Tips & Tricks for Hybrid Techniques

• Perform **first** the CFA-TEA and then the puncture
  Risk:
  - **subintimal** wire passage in the iliac artery after puncture of the occluded CFA

• Cross the iliac lesion in an antegrade fashion via a cross-over or a brachial puncture when you fail the retrograde access
Place stents in the distal external iliac artery only AFTER CFA endarterectomy and patchplasty

Risk:
- poor clamping for proximal bleeding control
- thrombosis of the stented iliac artery
Hybrid Techniques

Benefits:

- Less invasive procedure
- Overcome more complex anatomies in high-risk patients
- High initial technical success (90% to 95%)
- No need for extensive venous graft material

Hybrid Techniques

open revascularization

endovascular techniques
Hybrid Procedures for Peripheral Obstructive Disease - Step by Step -

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