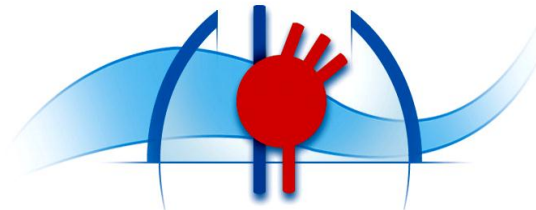


Essential steps for BTK

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Department of vascular surgery
Institut du Thorax, Nantes, France

l'institut du thorax





Critical limb ischemia



Arteriography

- Operating room
- Diagnosis
- Treatment

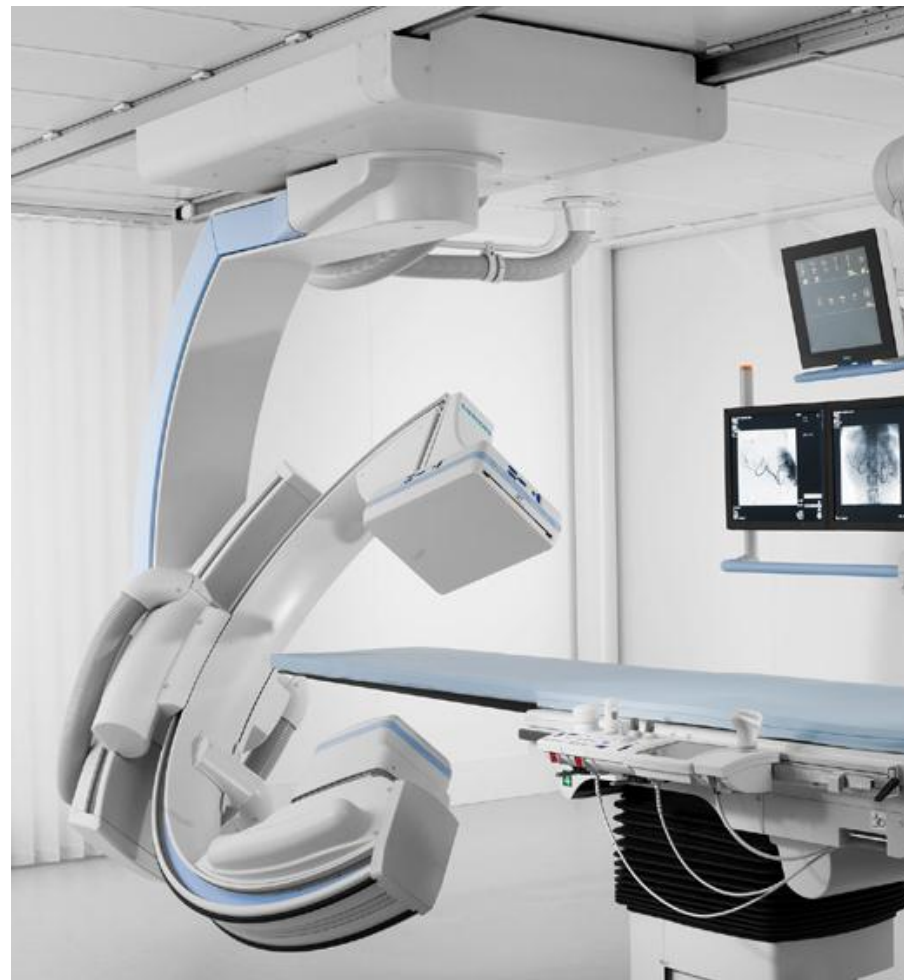
Endovascular repair first



Fluoroscopic guidance



Lab cath

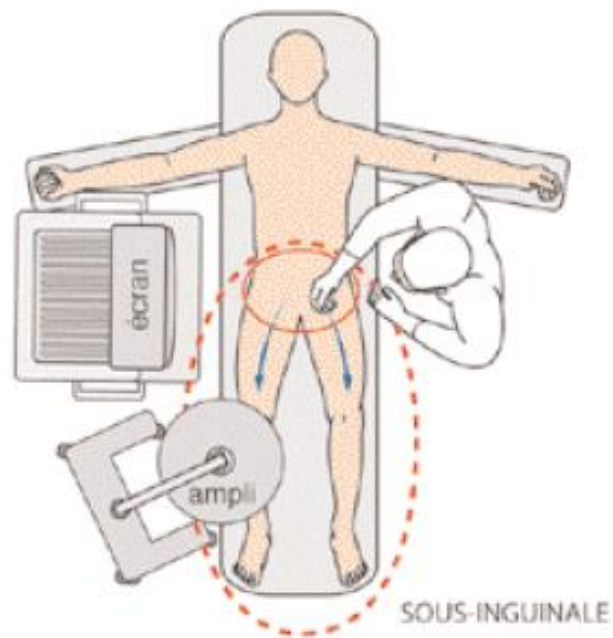
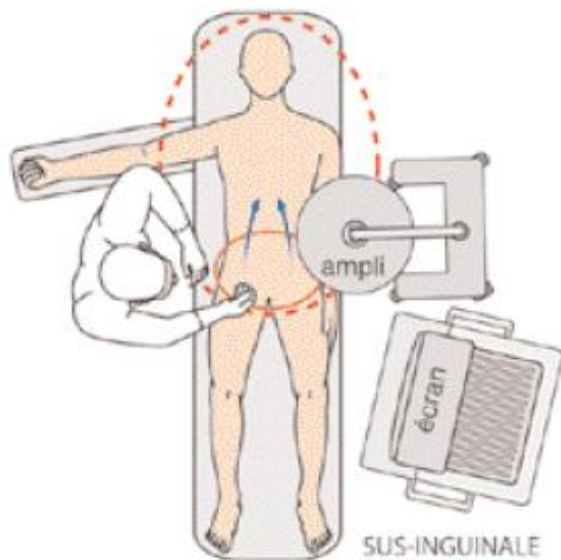




Approaches

Retrograde (cross over)

Anterograde

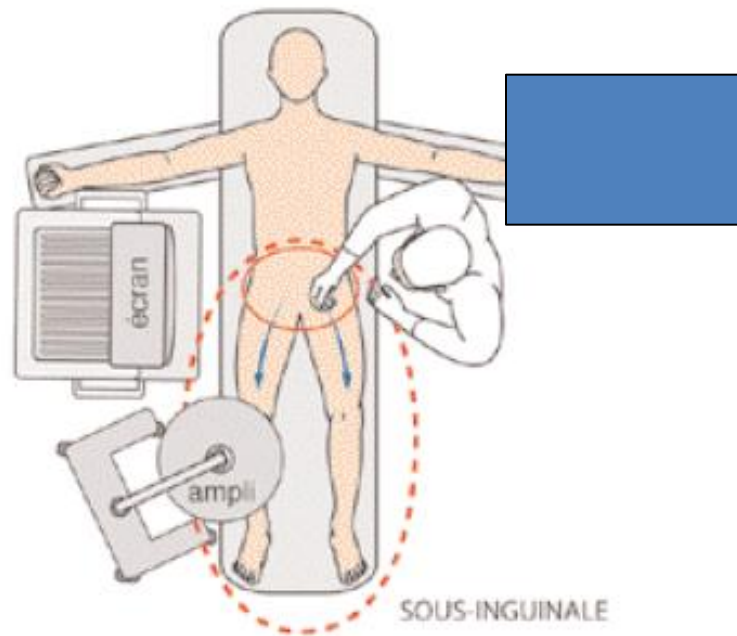




Anterograde approach

Under local anesthesia and conscious sedation

Using duplex scan





Anterograde approach

To avoid in case of:

- Obesity
- Common femoral lesions
- High common femoral bifurcation
- Ipsilateral iliac artery lesion

Avantages

- Quick
- Push
- Shorter guides and catheters

Disavantages

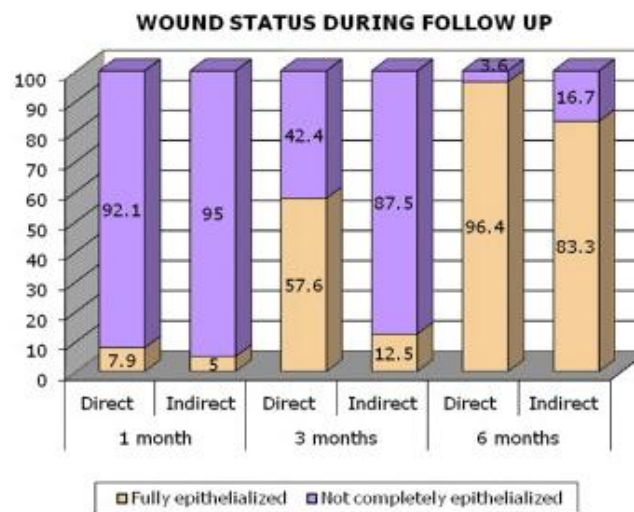
- Irradiation+++
- Compression



Strategy

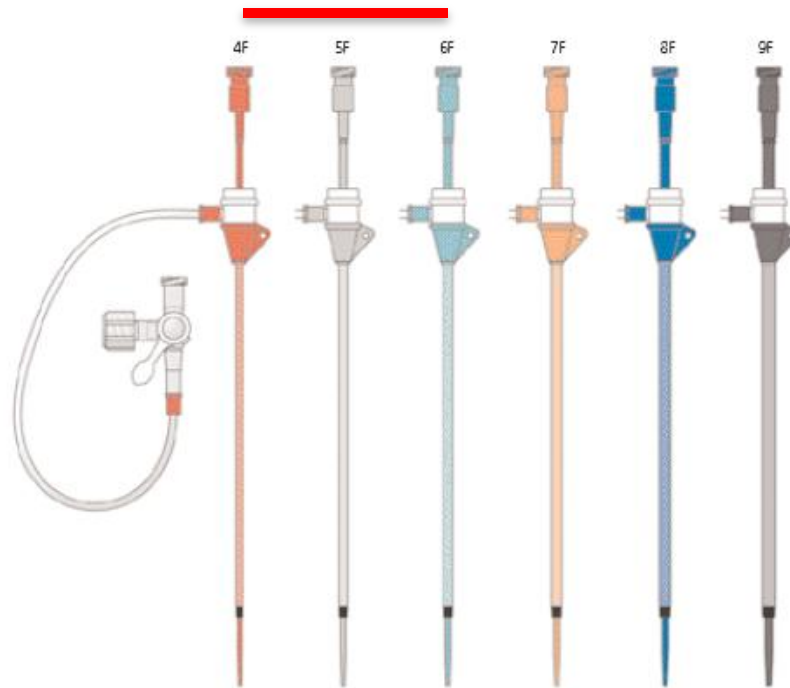
- 1st: to improve the inflow
 - *Iliac and femoral lesions*
 - *could be sufficient*
 - *Stenting?*

- 2nd: to treat the BTK lesions

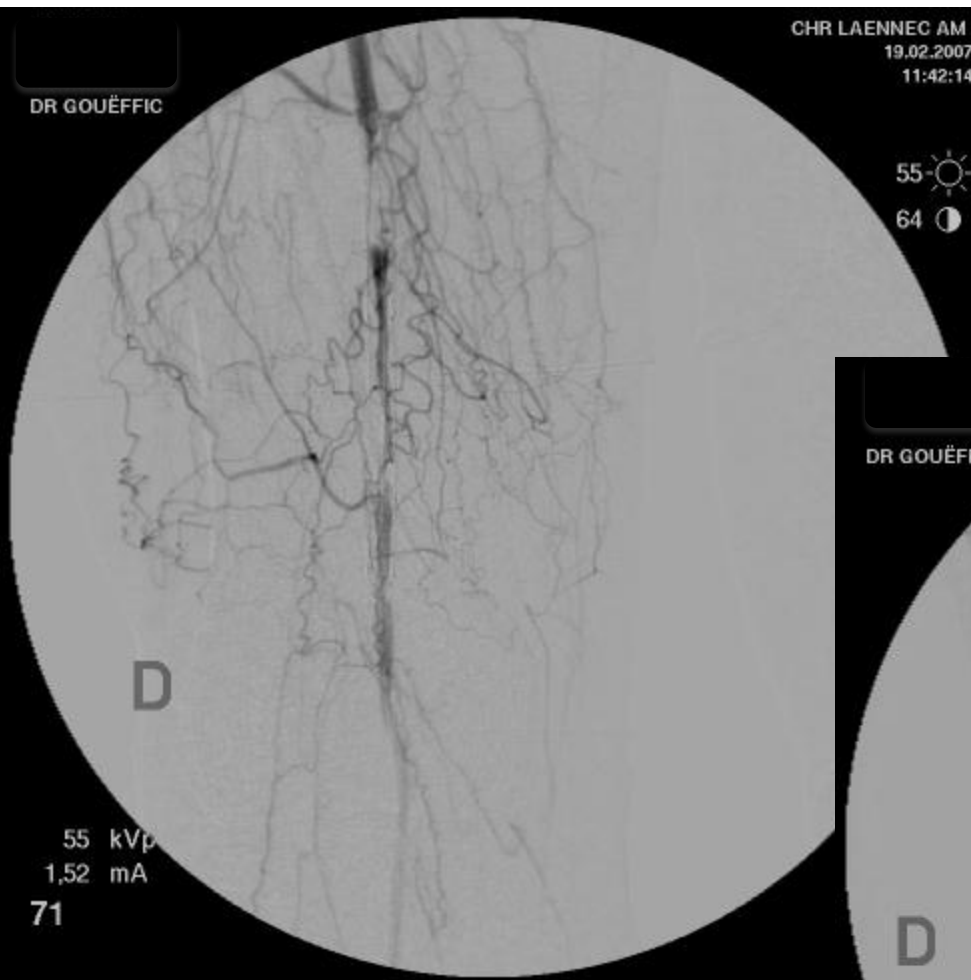




Sheath external diameter



SFA disease – Stenting -Thromboaspiration





Sheaths length

Flexor [®] Sheaths (4 or 5 Fr)	Length
Flexor Shuttle Tibial	90 and 110 cm
Flexor Ansel	45, 90 and 110 cm
Flexor High-Flex	55 and 70 cm

Approach - Obesity – SFA disease

GA
RA

DR GOUËFFIC
OEC SERIES 9801

CHR LAENNEC AM
27.02.2008
12:23:33

62 ☀
64 ●

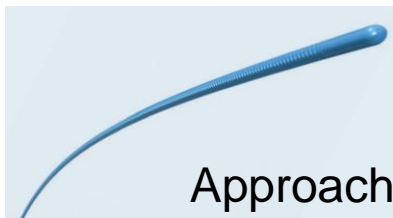
62 kVp
5,13 mA
210

OEC





Hydrophile guidewire: *to catheterize*

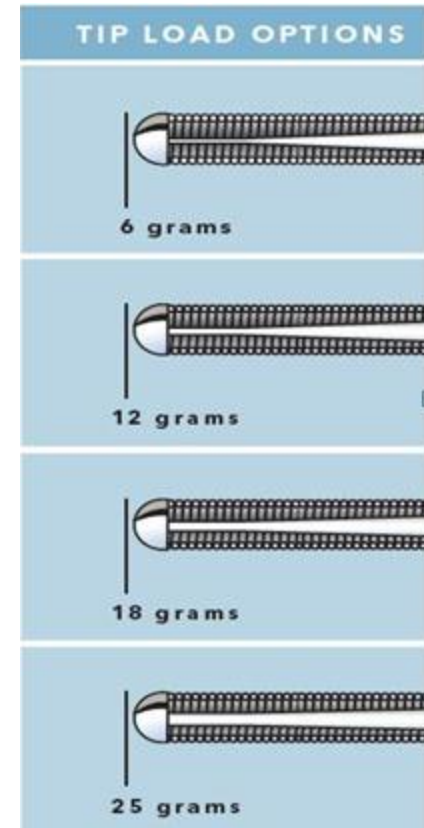
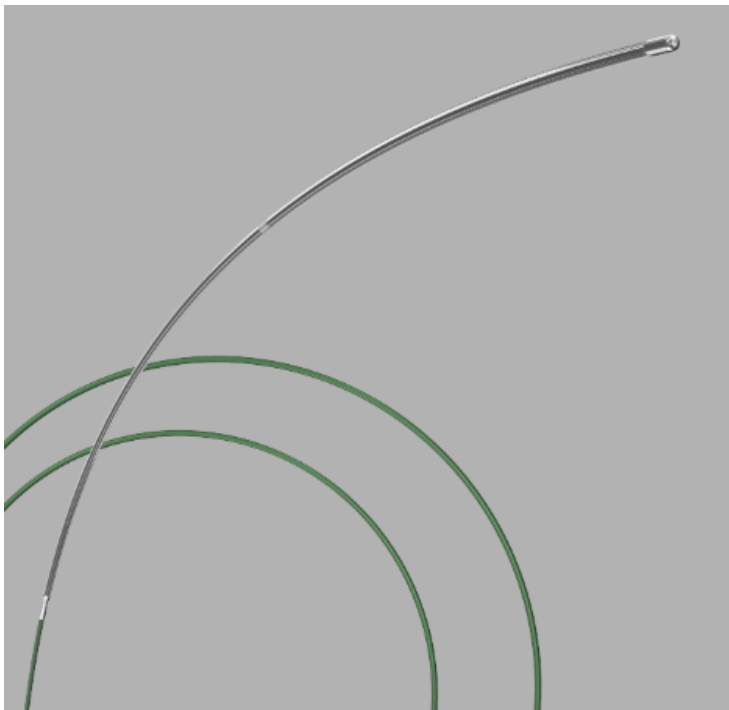


Approach Hydro ST

Features	Benefits
Supportive stainless steel mandril	Helps in navigating support catheters smoothly through the vessel
Hydrophilic coated distal tip	For smooth advancement through the vessel
Platinum coils in the distal tip	Provide extra visibility
0.014 or 0.018	Profile or pushability
Lengths (135, 190, 300 cm)	According the approach, the catheter shaft



CTO guidewire: *to recanalize*





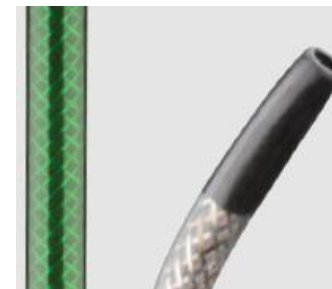
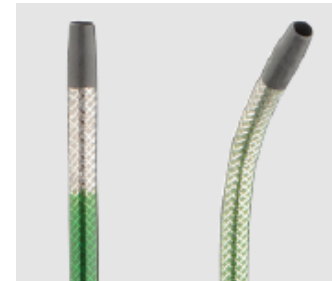
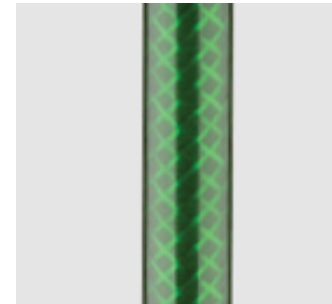
Support catheter

Braided – giving pushability, torqueability, extra support and kink resistant

Angled tip - makes it possible to redirect the wire when crossing an occlusion

Low profile from tip to hub – enhanced trackability and flexibility.

Over the wire - arteriogram and guidewire changements

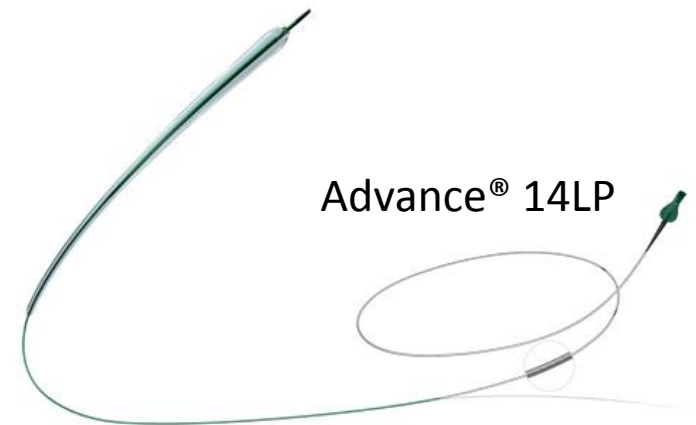


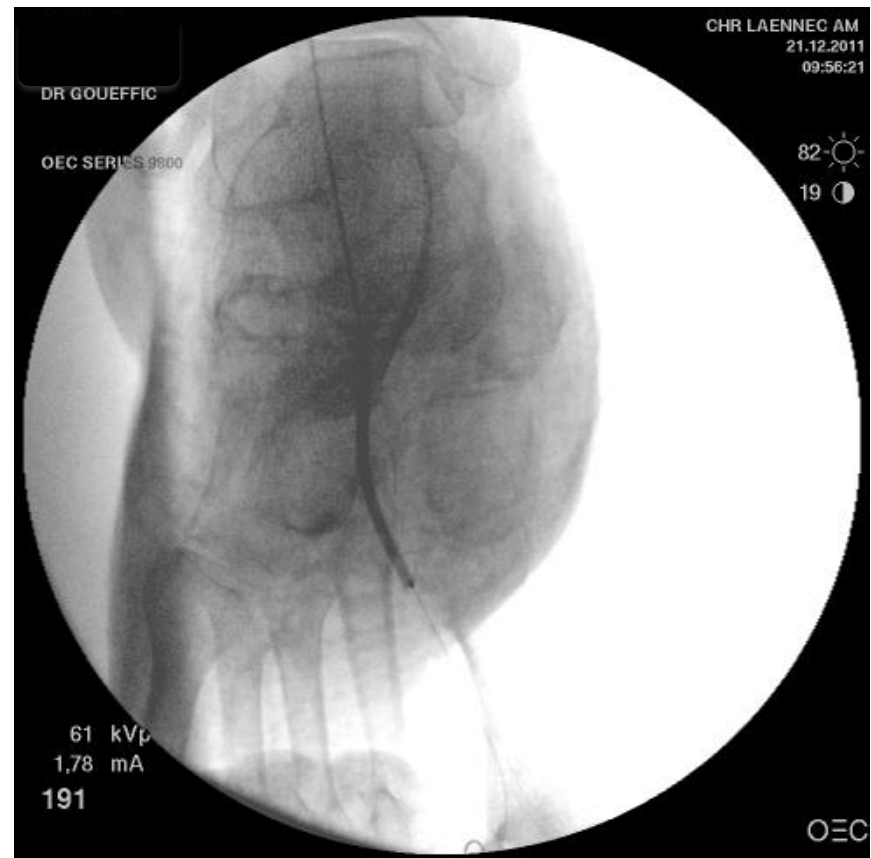
CXI support catheter
90-150cm

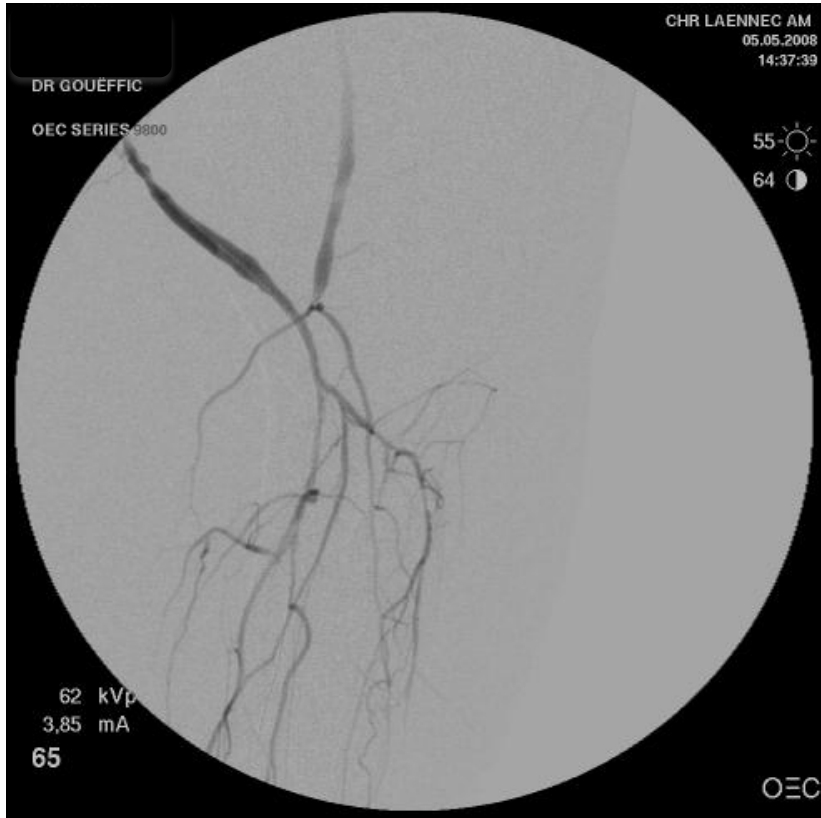


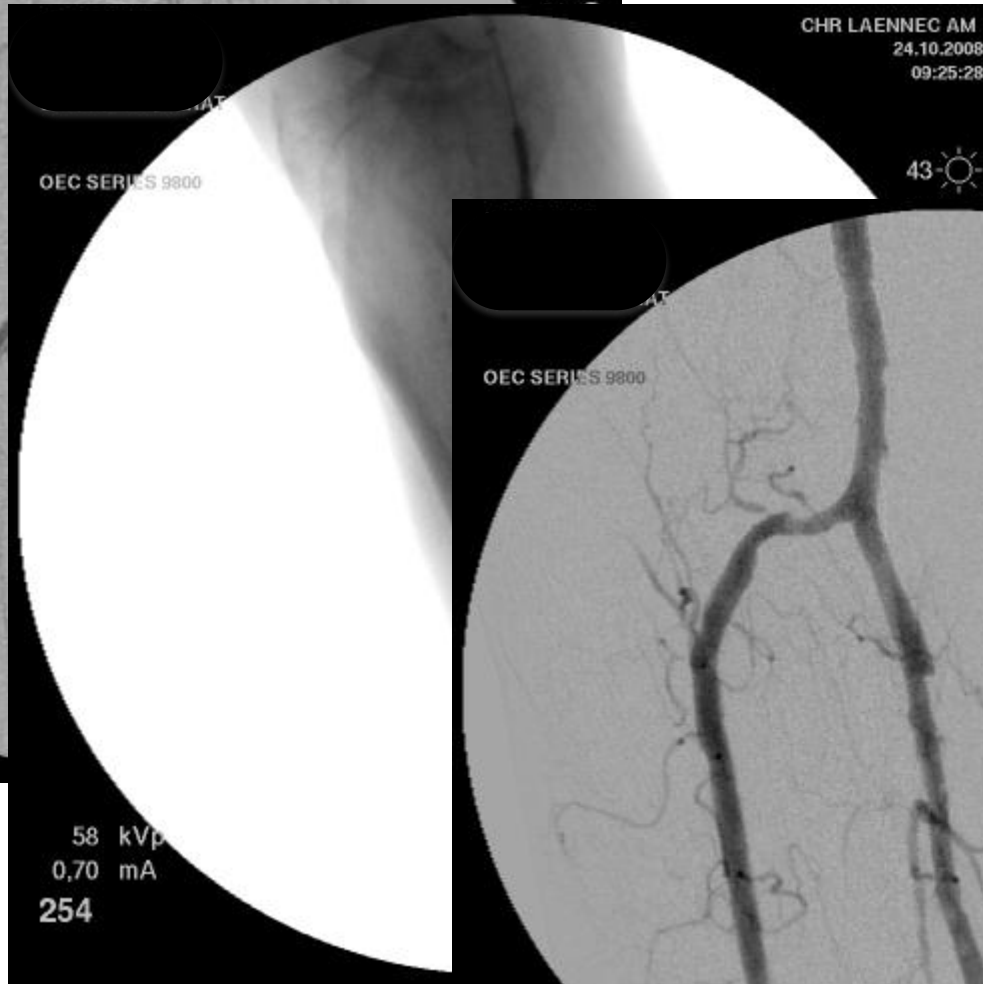
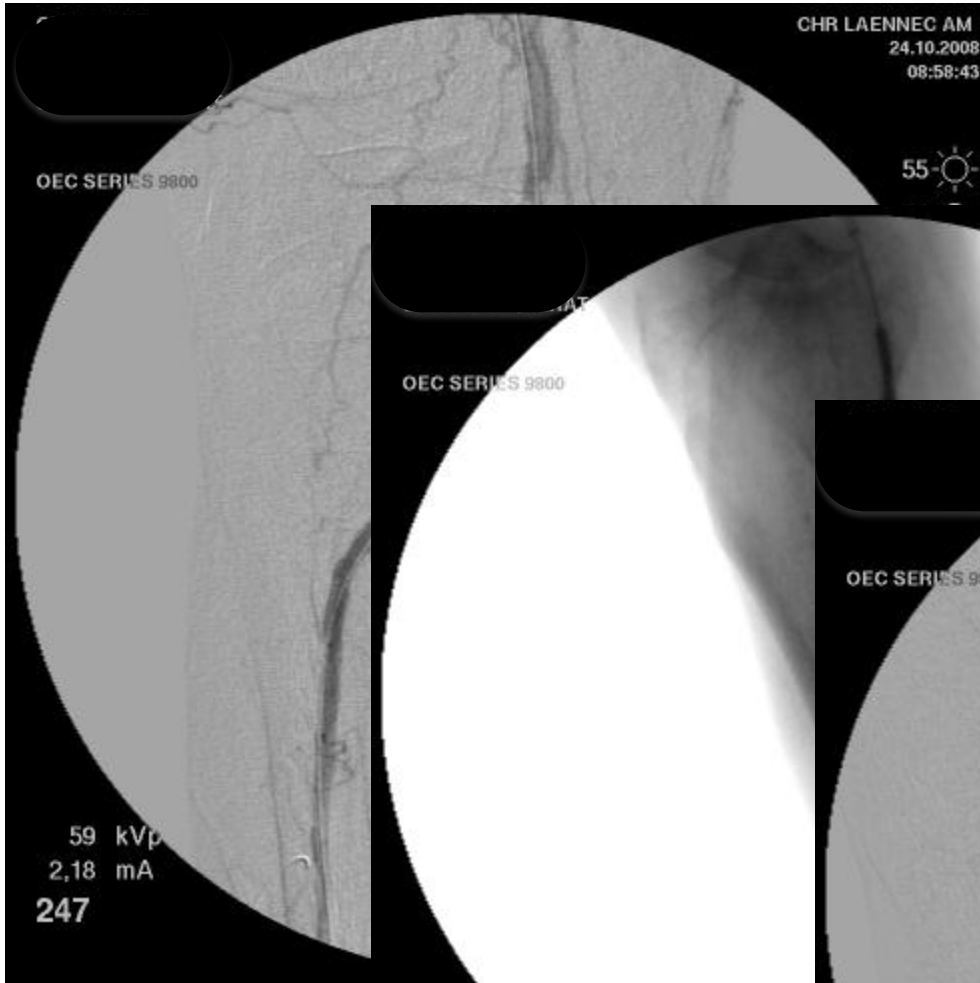
Balloon catheter: *dedicated below the knee design*

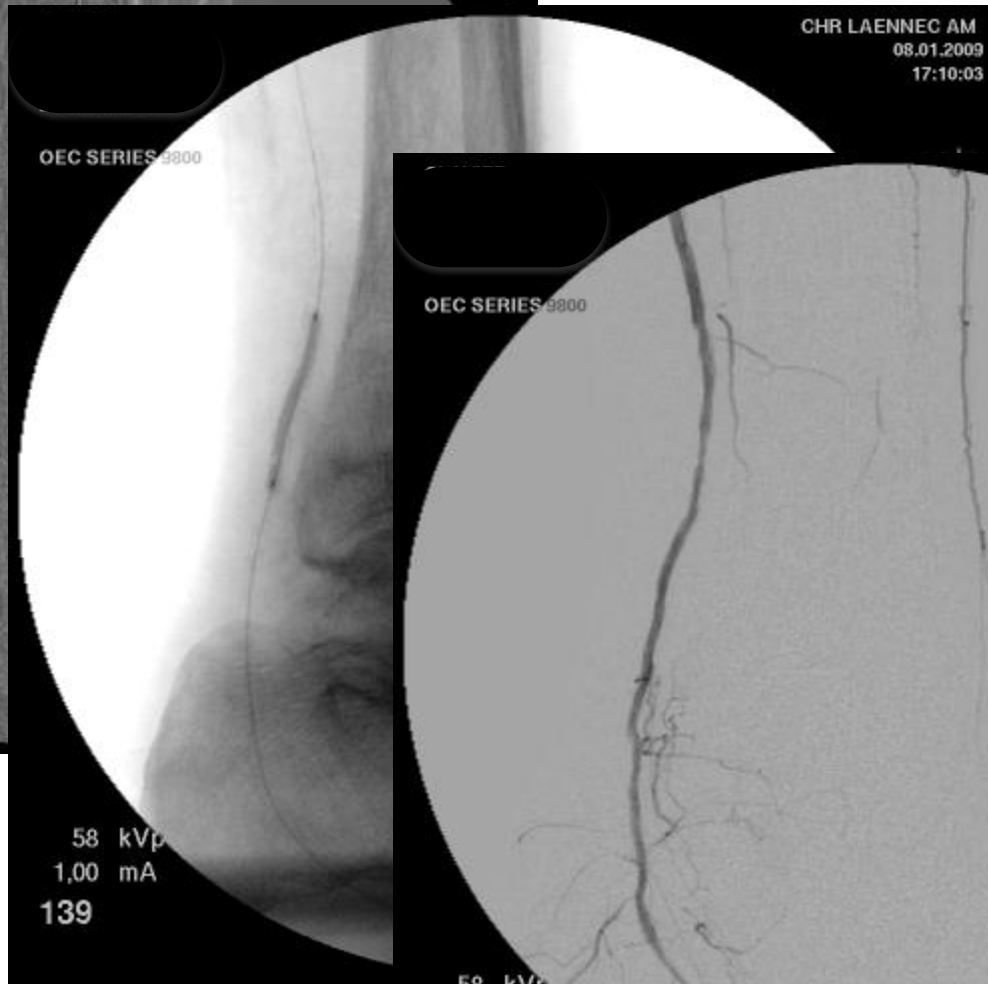
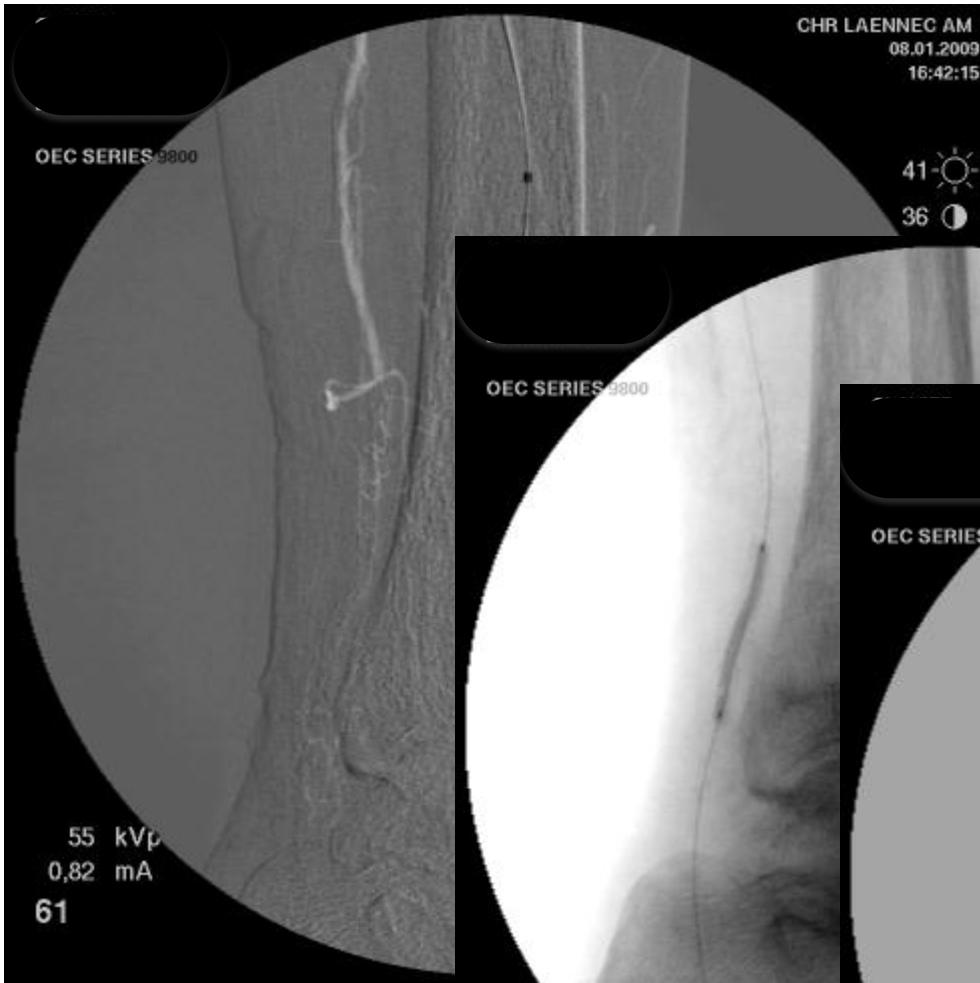
- Otw and Rx
- Guidewire diameter: 0.014 / 0.018
 - Shaft: 4Fr
- Shaft length: 50 – 110 – 170 cm
- Balloon diameter: 1.5 to 4-mm
- Balloon length: from 20 to 200mm
 - High rated burst pressure













Stents

As a bail out

- *Residual stenosis >50%*
- *Flow limiting dissection*



Balloon expandable stents



Self expandable stents



Message to take home

- CLI and BTK lesions: endovascular first
- Anterograde access and direct revascularization of the ischemic angiosome
 - Dedicated devices
- Technical failure: other approaches and techniques