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LEIPZIG INTERVENTIONAL COURSE 2022

LINC

6 – 9 June 2022

Trade Fair Leipzig, Hall 2
Messe-Allee 1
Leipzig, Germany
and virtual

GUIDE TO LIVE CASE TRANSMISSIONS

LINC

Guide to live case transmissions

During the Leipzig Interventional Course 2022 more than 40 interventional and surgical live cases are scheduled to be performed and transmitted to the auditorium. The aim of this booklet is to give you an overview about the live case schedule and to provide a practical guide through the procedures.

We hope for your understanding that with respect to the clinical needs of the patients changes of the schedule may occur. Furthermore, the anticipated procedural steps are just an outline of the procedure. Depending on the discretion of the operator the procedural strategy and/or the choice of material may vary.

LEIPZIG
INTERVENTIONAL
COURSE
2022

LINC

Monday,
6 June 2022

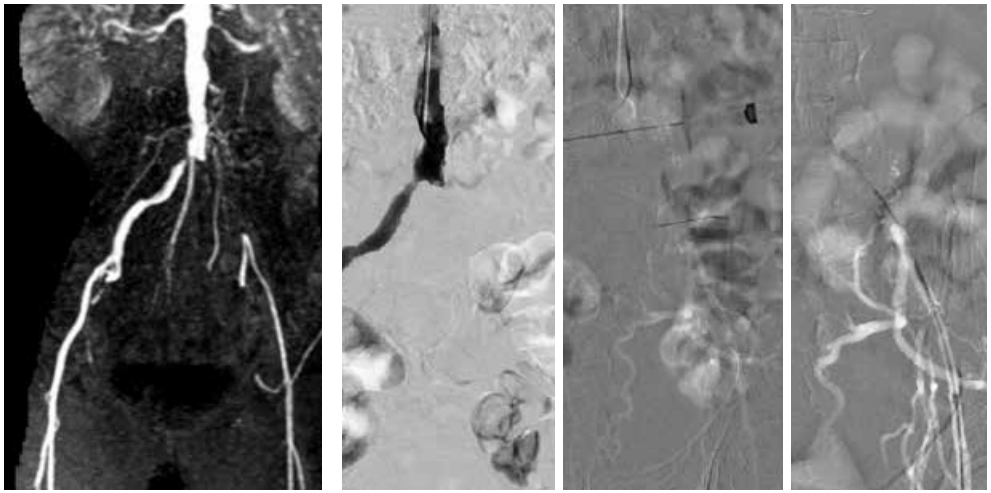
Case 01 – LEI 01: Male, 54 years (M-T)

Complex obstruction of the aortoiliac bifurcation

Operators: Andrej Schmidt and Axel Fischer

Clinical data: Severe claudication bilateral, maximal walking-capactiy 150 meters,
Pain left > right buttock, thigh and calf
Unsuccessful recanalization-attempt elsewhere 5/2022
Guidewire-passage from antegrade (transbrachial) and retrograde impossible

Risk factors: ABI right 0.76; left 0.60
Hypertension
Smoker



Procedural steps:

1. Transbrachial and left femoral access
- 7F 90cm Check-Flo Performer Sheath (COOK)
- 7F 25cm Radiofocus Introducer II (TERUMO)
- SupraCore 300cm 0.035" Guidewire (ABBOTT)

2. Passage of the CTO left common iliac artery:
Via brachial access:
- Stiff straight 0.035" Radifocus Guidewire 260cm (TERUMO)
- 6Fr Launcher Guiding-Catheter 100cm (MEDTRONIC)
- 5Fr 125cm Judkins Right Diagnostic Catheter (CORDIS)

3. Passage into the CTO left CIA from left retrograde for reversed CART-technique:
- Stiff straight 0.035" Radifocus Guidewire 260cm (TERUMO)
- 5.0/40mm Mustang Balloon (BOSTON SCIENTIFIC)

4. Balloon-angioplasty and stenting in kissing-technique:
- Mustang-balloons 6/40 (BOSTON SCIENTIFIC)
- Advanta V12 Balloonexpandable Covered Stent (GETINGE)
- 8.0/37mm right CIA; 8.0/57mm left CIA

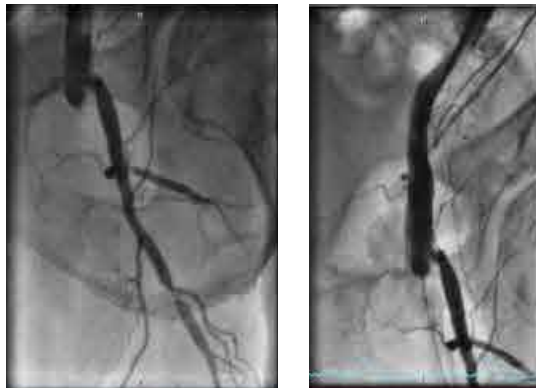
Case 02 – Bad Krozingen 01: Male, 70 years (K-G)

Directional atherectomy followed by drug-coated balloon angioplasty of deep femoral artery in the presence of a chronic SFA occlusion

Operators: Jacques Börries

Clinical data: Claudication Rutherford 3 left leg
October 2021 DCB angioplasty of DFA main trunk due to PAOD Rutherford 5, wounds healed in the meantime
September 2021 stent-recanalisation of chronic CTO of SFA right leg

Risk factors: CVRF: Nicotine abuse, arterial hypertension, hypercholesterolemia
Coronary artery disease, cardiomyopathy with mid-grade impaired cardiac function



October 2021 pre DCB

October 2021 post DCB

Procedural steps:

1. Retrograde right transfemoral access 7F

2. Placement of a Spider filter (MEDTRONIC) into the DFA

3. Directional atherectomy (HawkOne 7F LS, MEDTRONIC)

4. Postdilatation with DCB (Tulip, ACOTEC)

5. Sheath removal with closure device

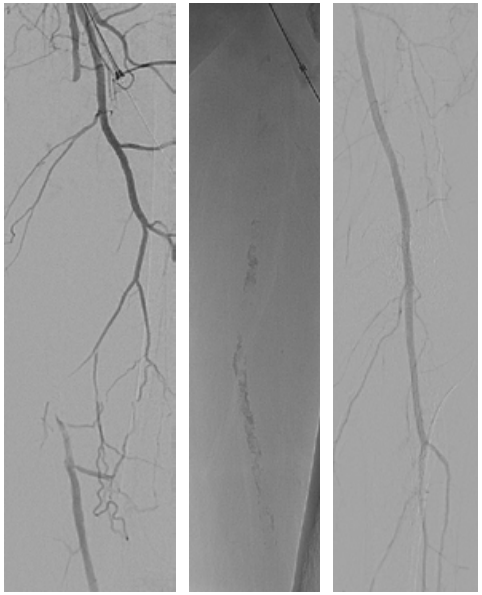
Case 03 – LEI 02: Male, 65 years (KOP-L)

Calcified SFA-CTO left

Operators: Andrej Schmidt and Axel Fischer

Clinical data: Severe claudication left leg, walking capacity 100 meters
ABI left 0.56; Rutherford class 3
PTA left and right iliac arteries 1 and 2/2022
CAD, PTCA 2008 and 2016
COPD
Hypertension,
Former smoker

Risk factors: Angiography during angioplasty of the right iliac arteries



Procedural steps:

1. Cross-over approach
- 7Fr Flexor Check-Flo Balkin Up& Over Sheath 40cm (COOK)

2. Antegrade guidewire-passage:
- Command 18 300cm Guidewire (ABBOTT)
- 0.035" Guidewire Straight 260cm (TERUMO)
- 0.035" QuickCross Support Catheter 130cm (PHILIPS)

3. In case of failure to pass into the true lumen distal to the CTO
- GoBack Crossing-Catheter, 4Fr-120cm (UPSTREAM PERIPHERAL)

4. Vessel-preparation and DCB-angioplasty
- Ultrascore 5/200 Scoring-Balloon (BD)
- Orchid Drug-Coated Balloons 5.0mm/120mm (ACOTEC)

5. Stenting on indication
- Supera Interwoven Nitinol-Stent (ABBOTT)

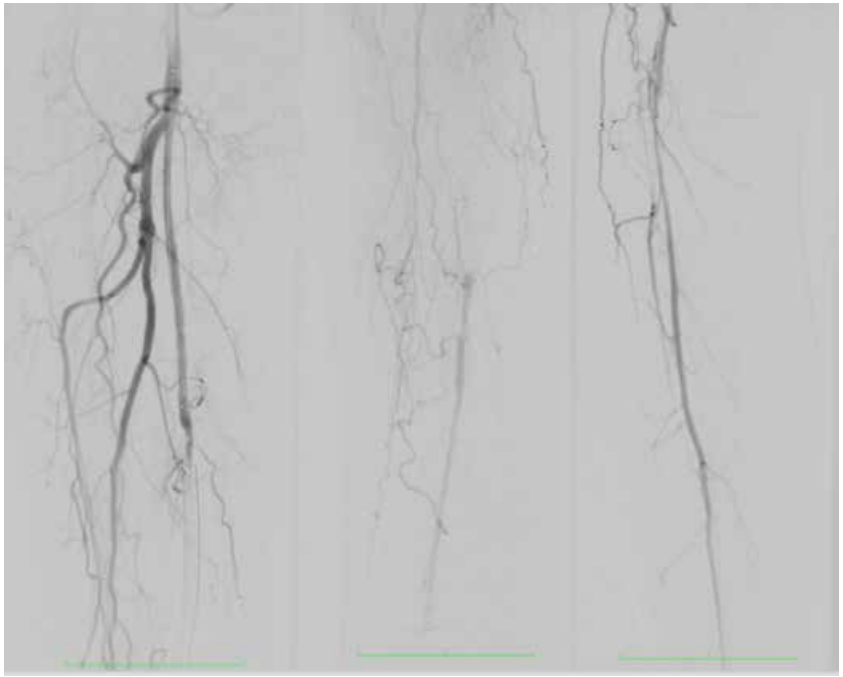
Case 04 – Münster 01: Female, 65 years (F-D)

OCT-guided Atheterectomy of Tosaka III ISR right SFA and distal popliteal stenosis

Operator: Arne Schwindt, Safa Al-Qudah

Clinical data: Rutherford III right leg, painfree wd 50m, ABI right leg 0,3
2012 nitinol stent right SFA

Risk factors: CVRF: Hypertension, hyperlipidemia



Procedural steps:

1. Left femoral access, 7F 45cm Destination x-over sheath (TERUMO) to right CFA

2. Wire-passage with 0,018 V18 wire (BOSTON SCIENTIFIC) and 0,035 Quick-cross (PHILIPS) support catheter

3. Placement of 4mm Spiderfilter (MEDTRONIC) to peroneal artery

4. OCT-guided atherectomy with Pantheris 3.0 7F directional atherectomy catheter (AVINGER) of SFA ISR and popliteal artery

5. Post PTA with 5x120mm paclitaxel eluting balloons, passeo lux (BIOTRONIK)

6. Filter removal via 0,035 Quickcross

7. Closure of access site with Proglide VCD (ABBOTT)

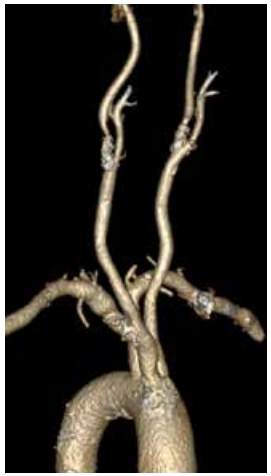
Case 05 – Milan 01: Male, 67 years (Q-G)

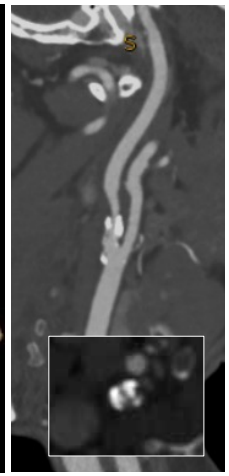
Right internal carotid stenosis, calcified

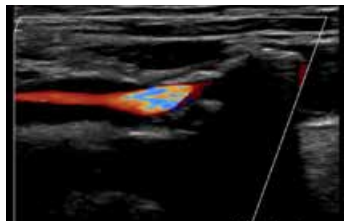
Operators: Piero Montorsi, Stefano Galli

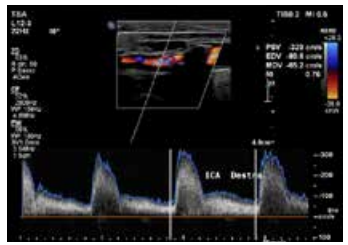
Clinical data: Long-standing type 2 diabetes (on target), hypertension, hypercholesterolemia
2021 CAD with 3-vessel disease treated by multiple DES. EF 55%
2022 Bilateral carotid artery disease (right 85%, left 65%). Asymptomatic.
Moderate renal failure (GFR 40ml/min/m2)

Risk factors: Doppler US: RICA PSV 3.29 m/sec
CT-angiography: Type 1 aortic arch. Critical RICA stenosis with >180° calcium distribution followed by long soft plaque; Normal brain CT scan









Procedural steps:

1. Right radial approach
- TERUMO slender sheath "6 in 5"

2. Right carotid axes engagement with coaxial system
- 6F MP guide over 5F 125cm-long Simmons-2 catheter

3. Baseline RICA and intracranial views angiography

4. Distal filter positioning
- Spider FX 5.0mm, MEDTRONIC or Filterwire EZ, BOSTON SCIENTIFIC

5. IVUS assessment
- Opticross, BOSTON SCIENTIFIC

6. Intra vascular lithotripsy with 4.0x12mm balloon
- SHOCKWAVE

7. IVUS assesmnet of the initial result
- Opticross, BOSTON SCIENTIFIC

8. Stenting with Roadsaver 8x30
- TERUMO

9. Stent post-dilation
- Sterling 5.0mm x 20mm, BOSTON SCIENTIFIC

10. Final IVUS assessment
- Opticross, BOSTON SCIENTIFIC

11. Final angiography

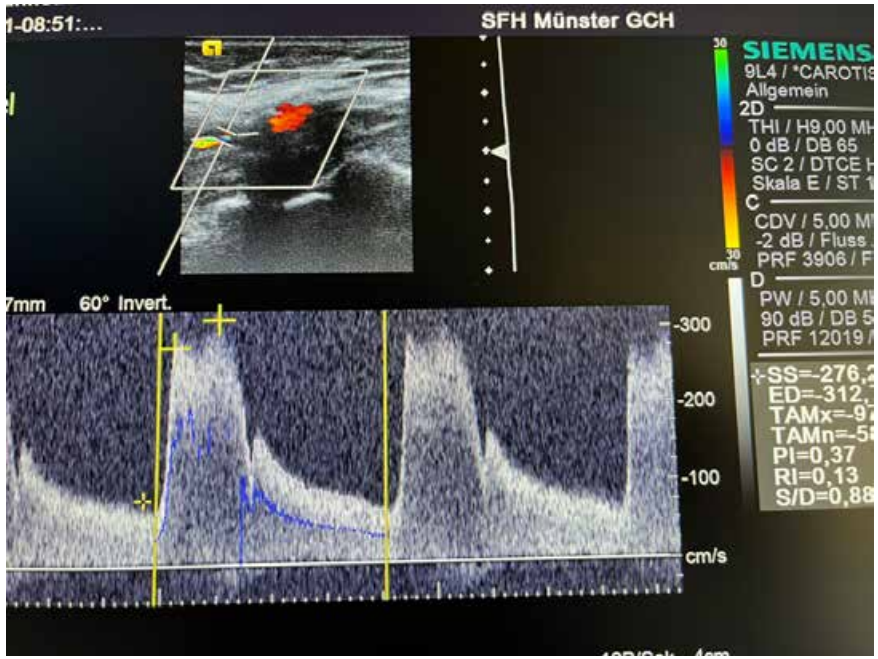
Case 06 – Münster 02: Female, 71 years (A-K)

Transradial carotid artery stenting for right side recurrent stenosis of internal carotid artery after surgical TEA

Operators: Arne Schwindt, Youssef Shehada

Clinical data: Eversion-endarterectomy of right carotid 2004
in yearly duplex FU high grade recurrent stenosis of right ICA,
vmax 300cm/sec., asymptomatic

Risk factors: CVRF: Hypertension, hyperlipidemia



Procedural steps:

1. Radial puncture right side with micropuncture set (COOK)

2. Change to 5F 90cm destination sheath (TERUMO)

3. Canulation of right CCA with 0,35 wire (Advantage, TERUMO) and Berenstein catheter (CORDIS)

4. Canulation of ICA-stenosis with 0,014 Epifilter wire (BOSTON SCIENTIFIC)

5. Implantation of dual layer micromesh-stent (Roadsaver, TERUMO)

6. Post dilatation with rx-balloon 5/6x30mm (Sterling, BOSTON SCIENTIFIC)

7. Withdrawal of catheters ad puncture site management with radial compression device (TR-band, TERUMO)

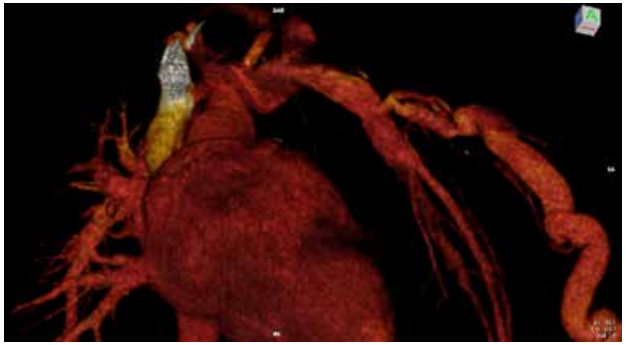
Case 07 – Varese 01: Male, 21 years

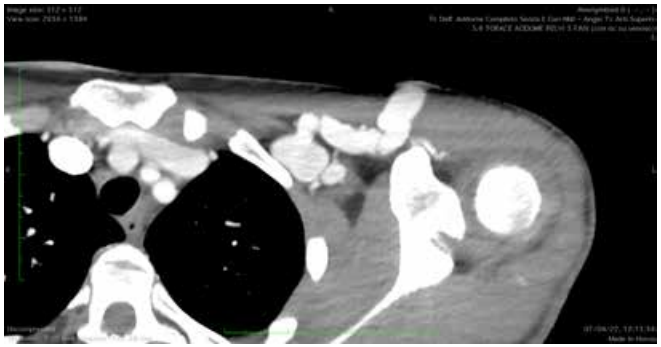
Stent graft of cephalic arch

Operators: Matteo Tozzi, Federico Fontana and Marco Franchin

Clinical data: Brachio-cephalic AV fistula

Risk factors: CT scan: Double stenosis in cephalic arch. From 6 to 9 mm in diameter





Procedural steps:

1. Vascular access cannulation
- 6F TERUMO, 0,35 J Radiofocus TERUMO

2. Femoral access
- 9F TERUMO , 0,35 J Radiofocus TERUMO, Emerald CORDIS J 0,35 260 cm

3. Balloons:
- Predilatation 10X40 Advance enforcer COOK

4. Stent Graft
- Wrapsody by MERIT from 9 to 12 in diameter and 50/75 or 100 in length

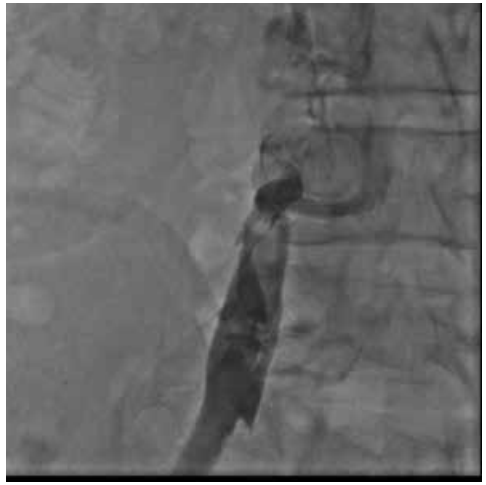
Case 08 – Modena 01: Male, 44 years (C-E)

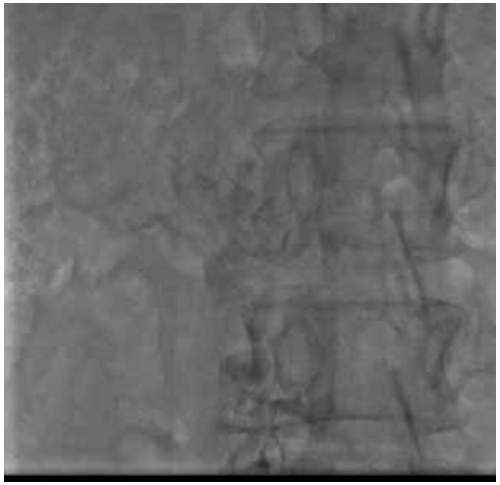
Ilio-caval occlusion recanalization

Operators: Marzia Lugli, Matteo Longhi, Elisa Munari

Clinical data: Comorbidities: Nephrotic syndrome till 17 (autoimmune cause), Coagulation defects: Leiden V hetero, therapy: acenocumarol

Risk factors: Acute DVT in 1998 (left leg) and 1999 (right leg). Bilateral Post-Thrombotic Syndrome Villalta score: 13 left leg, 14 right leg. Venous claudication. CEAP C4b bilateral. US examination: non-phasic flow common femoral vein bilateral, good access at femoral vein, good inflow. Wireless Air-Pletismography: outflow obstruction. Venography: cava occlusion, bilateral iliac stenosis





Procedural steps:

1. Bilateral ultrasound guided access at mid-thigh under general anesthesia, venography from both access.

2. Systemic heparinization, Recanalization of the inferior cava and ilio-femoral district with 0.035 Terumo Advantage wire J curve and Cook TriForce Peripheral Crossing Set

3. IVUS evaluation of the inferior cava and ilio-femoral district (Opticross 35 Peripheral Imaging Catheter – BOSTON SCIENTIFIC)

4. Multiple dilatation with Atlas Gold PTA Dilatation Catheter (from 12x40 to 20x40 mm) (BD)

5. IVUS evaluation of proximal and distal inferior cava landing zones and stent sizing according to vessel area (Opticross 35 Peripheral Imaging Catheter – BOSTON SCIENTIFIC)

6. Inferior cava stenting (Wallstent Endoprosthesis – BOSTON SCIENTIFIC) and postdilatation with Atlas Gold PTA Dilatation Catheter (BD)

7. IVUS evaluation of proximal and distal ilio-femoral landing zones, evaluation of the profunda vein system and possible extension under the inguinal ligament

8. Stenting of the iliac bifurcation with Kissing thechnique (Wallstent Endoprosthesis – BOSTON SCIENTIFIC) and postdilatation with Atlas Gold PTA Dilatation Catheter (BD)

9. According to IVUS evaluation possible stenting of the external iliac vein and common femoral vein (distal landing zone above profunda vein system) with Wallstent (BOSTON SCIENTIFIC) and postdilatation with Atlas Gold (BD)

10. Final IVUS evaluation and Venography from both access

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2022

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Tuesday,
7 June 2022

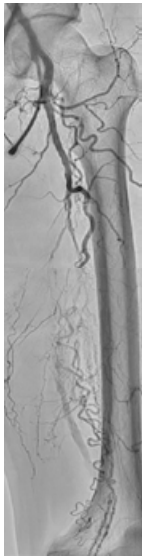
Case 09 – Tokyo 01: Male, 72 years, 171cm 66kg, BMI: 22.6 (M-H)

Left SFA Long-CTO

Operators: Tatsuya Nakama, Shunsuke Kojima, Kazuhiro Asano

Clinical data: Cre: 0.68, eGFR: 87mL/min
ABI Right: 0.55, Left: error
Type 2 DM, Hypertension, Dyslipidemia

Risk factors: Prior history of intervention, 2022/05/20 Left CIA-EIA: SMART (8.0x120mm)

Procedural steps:

1. Right CFA puncture

2. Crossover approach from Right CFA
- Radifocus stiff 1.5mm J (TERUMO), 6Fr Crossoversheath (CROSSROAD, NIPRO)

3. Control angiography

4. Antegrade approach
- V18 Control (BOSTON SCIENTIFIC) + 4Fr Vertebral Tempo (CORDIS)

5. Retrograde approach (if required)
- V18 Control (BOSTON SCIENTIFIC) + 1.8Fr Carnelian suport (Tokai Medical)

6. IVUS (BOSTON SCIENTIFIC)
- Confirm the guidewire passage route and vessel size

7. Pre-dilatation
- 5.0 or 6.0x100mm MUSTANG (BOSTON SCIENTIFIC)

8. Finalize
- DCB (Ranger, BOSTON SCIENTIFIC) application or
Full cover DES (Eluvia, BOSTON SCIENTIFIC) implantation

9. IVUS and final angiogram
End of the procedure

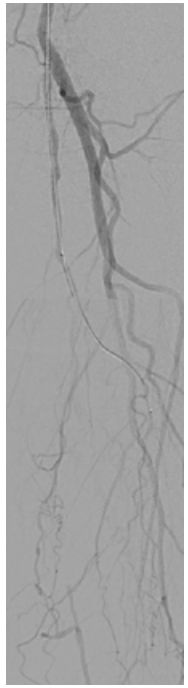
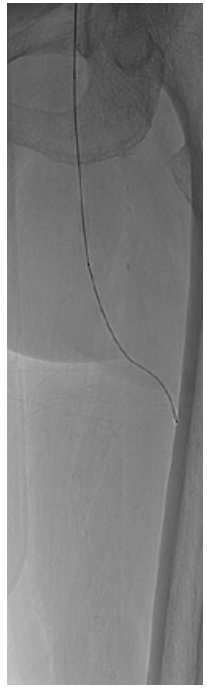
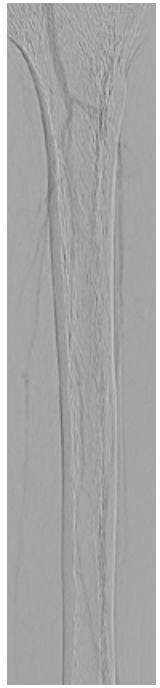
Case 10 – LEI 03: Female, 65 years (H-S)

Low profile devices for SFA total occlusion treatment

Operators: Andrej Schmidt and Axel Fischer

Clinical data: Severe claudication left leg, walking capacity 100 meters
ABI left 0.60, Rutherford class 3
Angioplasty of iliac stenosis right and left 4/2022 with only little relief of symptoms
Diabetes mellitus type 2
Hypertension

Risk factors: Angiography left leg during PTA of iliac arteries showing
small diameter infrainguinal arteries

Procedural steps:

1. Cross-over approach from right to left
- 5Fr Fortress Sheath (BIOTRONIK)

2. Antegarde guidewire-passage attempt
- Command 18 300cm Guidewire (ABBOTT)
- Passeo 18 Balloon 4.0/120mm (BIOTRONIK)

3. Retrograde approach in case of antegrade failure
- proximal anterior tibial artery access with
- 4Fr-10cm sheath (TERUMO)

4. Drug-coated balloon treatment and stenting
- Passeo Lux 5.0/120mm Drug-coated balloon (BIOTRONIK)
- Pulsar-18 T3 6.0/120 (BIOTRONIK) implantation via retrograde or antegrade access

Case 11 – Münster 03: Male, 84 years (H-R)

IVUS controled atherectomy of popliteal artery in patient with CLI

Operators: Arne Schwindt, Youssef Shehada

Clinical data: Patient with gangrene of first digit right foot, Rutherford VI, ABI 0,3

Risk factors: CVRF: Hypertension, IDDM
CTA: Subtotal stenosis of right popliteal artery,
occlusion of posterior tibial artery and stenosis of anteror tibial artery

High grade right popliteal stenosis &
CTO of posterior tibial artery

Procedural steps:

1. Antegrade access right common femoral artery and intrduction 7F 10cm sheath (TERUMO)

2. Canulation of popliteal artery stenosis with 0,018 wire (V12 BOSTON SCIENTIFIC) and 0,018 support catheter (Quickcross/PHILIPS), change to 0,014 300cm Phoenix wire (PHILIPS)

3. Analysis of lesion with IVUS catheter (Visions PV .018, PHILIPS)

4. Atherectomy of lesion with Phoenix 2.2 deflected catheter (PHILIPS)

5. DCB-PTA of popliteal artery with Stellarex Ballon (PHILIPS)

6. Control of lesion with IVUS catheter (Visions PV .018, PHILIPS)

7. Adjunctive stenting if needed with either InTact Tack (PHILIPS) or Supera stent (ABBOTT)

8. Treatment of BTK-vessels with Phoenix 1,5 (PHILIPS) and DCB (Stellarex, PHILIPS)

9. Angiographic and IVUS control of result

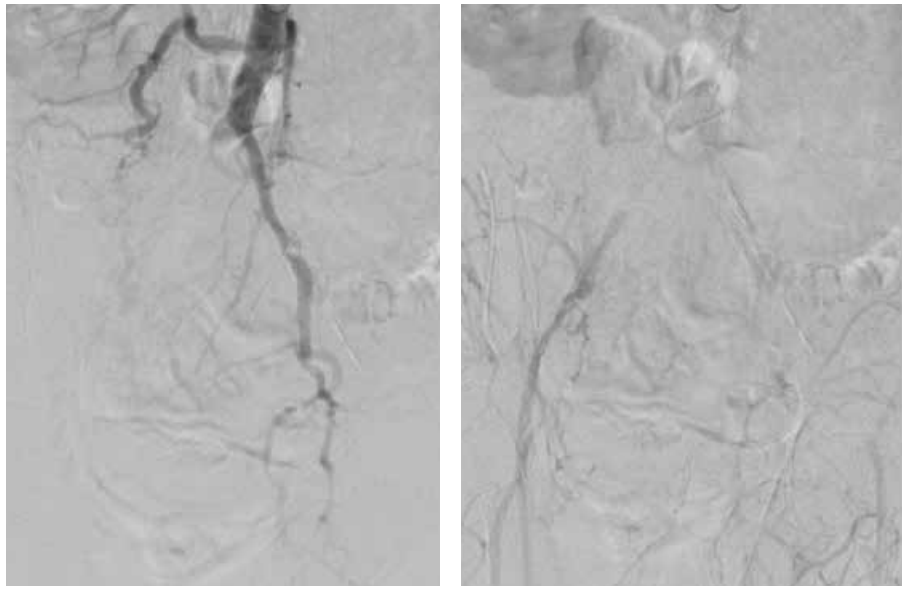
Case 12 – LEI 04: Male, 52 years (M-E)

Chronic, Calcified Occlusion right Common Iliac Artery

Operators: Andrej Schmidt and Sandra Düsing

Clinical data: Severe claudcation right leg (buttock, thigh and calf)
Walking capacity 100 meters
PTA / stenting of a left external iliac occlusion 12/2021 elsewhere

Risk factors: Current smoker
Hypertension
ABI right 0.58; left 0.81



Procedural steps:

1. Transbrachial and right femoral access
- 7F 90cm Check-Flo Performer Sheath (COOK)
- 7F 25cm Radiofocus Introducer II (TERUMO)
- SupraCore 300cm 0.035" Guidewire (ABBOTT)

2. Passage of the CTO right common iliac artery
Via brachial access:
- Stiff straight 0.035" Radifocus Guidewire 260cm (TERUMO)
- 6Fr Launcher Guiding-Catheter 100cm (MEDTRONIC)
- 5Fr 125cm Judkins Right Diagnostic Catheter (CORDIS)

3. Passage into the CTO left CIA from right retrograde for reversed CART-technique
- Stiff straight 0.035" Radifocus Guidewire 260cm (TERUMO)
- 5.0/40mm Mustang Balloon (BOSTON SCIENTIFIC)

4. Balloon-angioplasty and stenting in kissing-technique
- Mustang-balloons 6/40 (BOSTON SCIENTIFIC)
- Viabahn VBX Balloonexpandable Endoprosthesis (GORE)
- 8.0/59mm right CIA; 8.0/39mm left CIA

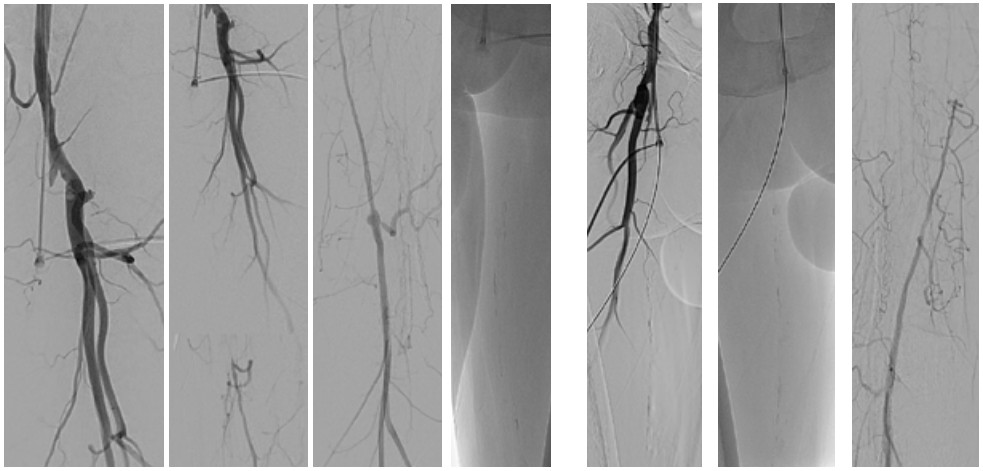
Case 13 – LEI 05: Male, 58 years (J-F)

Directional Atherectomy and Antirestenosis Treatment (DAART) of a SFA-CTO

Operators: Andrej Schmidt and Axel Fischer

Clinical data: Severe claudication bilateral, walking capacity 150 meters
ABI right 0.62; left 0.6
SFA total occlusions both side, PTA right iliac 4/2022
Hypertension, Current smoker

Risk factors: Angiography during iliac PTA showing bilateral SFA CTOs, moderately calcified



Procedural steps:

1. Right groin cross-over approach
- 7Fr Balkin Up&Over Sheath 45cm (COOK)

2. Antegrade guidewire-passage, preferably intraluminal
- Command 18 300cm Guidewire (ABBOTT)
- 0.018" TrailBlazer Support-Catheter 130cm (MEDTRONIC)

3. Retrograde access in case of failure to pass from antegrade or subintimal passage
- 9cm 21 Gauge needle (B Braun) for distal SFA-puncture
- Command 18 300cm Guidewire (ABBOTT)
- 0.018" TrailBlazer Support-Catheter 90cm (MEDTRONIC)

4. Filter-Protection and atherectomy
- Spider-Filter 7mm (MEDTRONIC)
- HawkOne LX Directional Atherectomy System (MEDTRONIC)

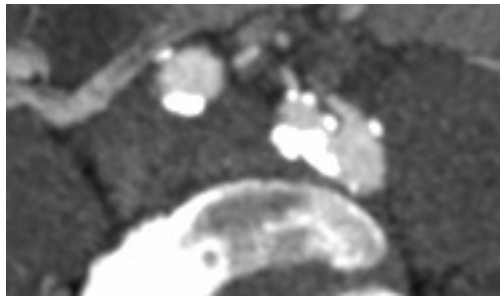
5. PTA with drug-coated balloons
- In.Pact Admiral 6/120 (MEDTRONIC)

Case 14 – Münster 04: Male, 60 years (B-D)

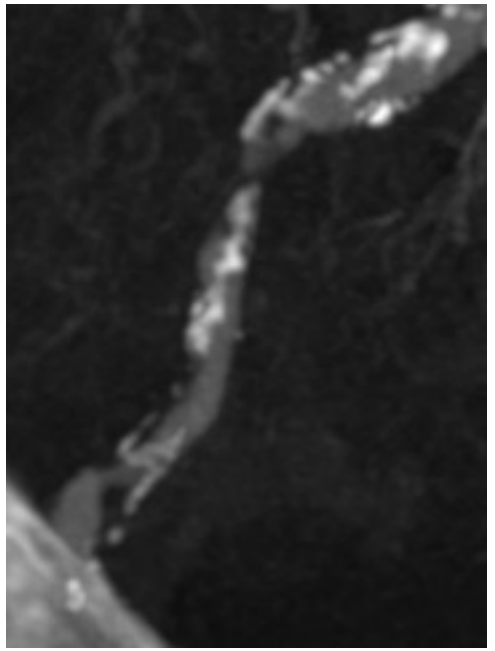
Transradial approach for iliac stenting in PAD patient

Operators: Arne Schwindt, Youssef Shehada

Clinical data: Rutherford III WD 100mABI bilateral 0,6 CTA: High grade bilateral common iliac artery stenosis, right side external iliac artery stenosis
CVRF: Hypertension, Nicotine use



Left common iliac stenosis



Right external iliac stenoses proximal & distal

Procedural steps:

1. Radial puncture left side with micropuncture set (COOK)

2. Change to 120cm 6F (8.5FOD) guiding catheter (SheathLessPV ASAHI INTECC)

3. Canulation of right iliac lesions with 0,035 wire (Advantage TERUMO)

4. Treatmet of external iliac artery with 8x60mm SES and common iliac artery with 8x38mm cobalt chromium stent, 170cm delivery system (Dynetic BIOTRONIK)

5. Treatment of left common iliac with 10x38 cobalt chromium stent, 170cm delivery system (Dynetic BIOTRONIK)
Puncture site management with radial compression device (TR-band TERUMO)

6. Withdrawal of catheters ad puncture site management with radial compression device (TR-band, TERUMO)

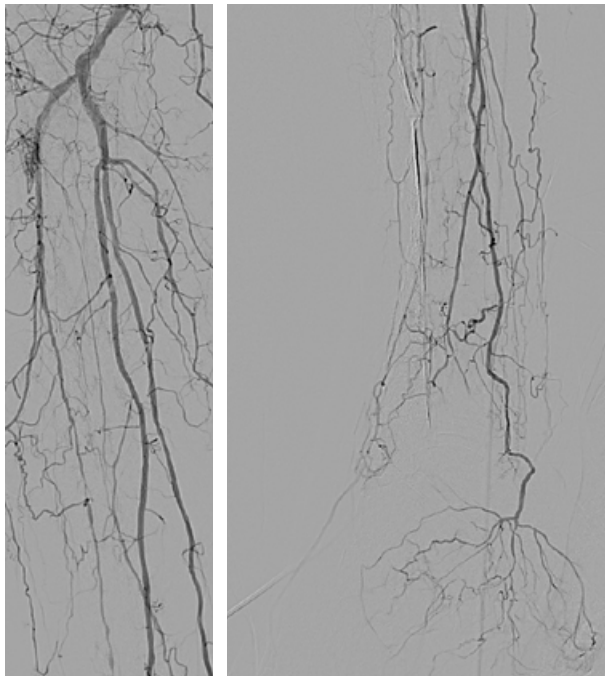
Case 15 – LEI 06: Male, 65 years (K-B)

Calcified BTK-Disease, CLI-Patient

Operators: Andrej Schmidt and Sandra Düsing

Clinical data: Ulceration right lateral forefoot, severe claudication right calf
Walking-capacity 50 meters
Complex recanalization of an extremely calcified long femoropopliteal occlusion 5/2022
Planned BTK-recanalization right
Stenting right SFA 2017 elsewhere, reoccluded
CAD, CABG 2017

Risk factors: Angiography before and after femoropopliteal recanalization 5/2022
ABI right 0.2



Procedural steps:

1. Rigth groin antegrade access and retrograde anterior tibial artery access
- 6Fr 55cm sheath (COOK)
- Micropuncture pedal access kit (COOK)

2. Antegrade and retrograde intraluminal wiring of the anteroir tibial artery CTO
- Connect 250 T 0.018" Guidewire 300cm (ABBOTT)
- Winn 200 T 0.014" 300cm Guidewire (ABBOTT)

3. Atherectomy of the calcified ATA
- Stealth 360 Peripheral Orbital Atherectomy System, Solide-Crown 1.5mm (CSI)

4. Drug-coated balloon angioplasty
- Litos 0.014" Drug-Coated Balloon (ACOTEC)

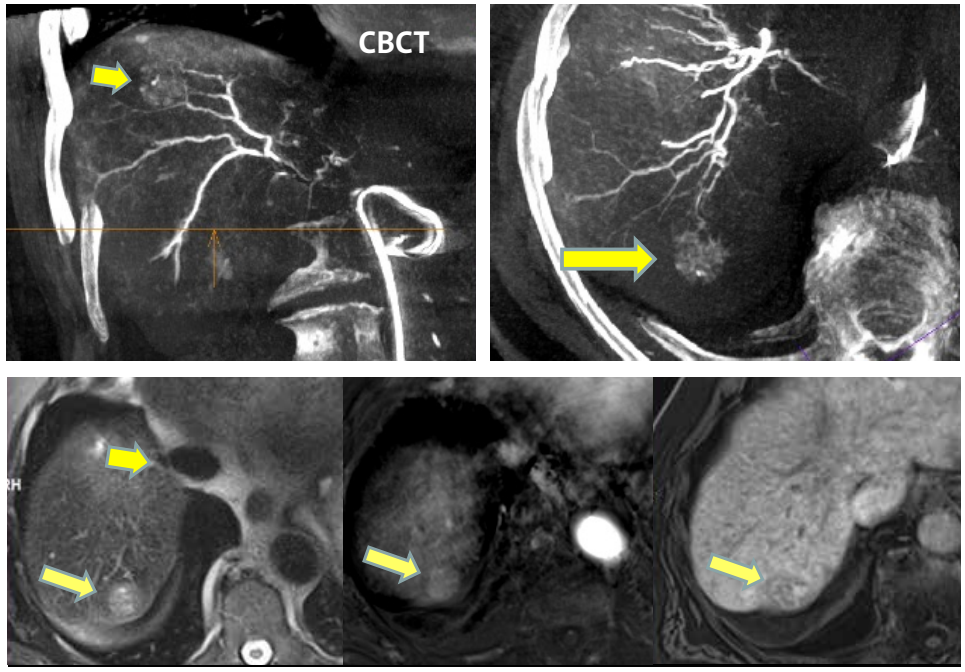
Case 16 – Jena 01: Male, 70 years (S-M)

Radio-Segment-Ectomy S VII in HCC

Operators: René Aschenbach, Philip Seifert

Clinical data: NTLC Child B, prior resection intrahepatic bile duct adenoma S VIII,
prior stereotactic radiation therapy of HCC S VIII (60Gy), new HCC segment VII,
TACE failure, ITB waived radiosegmentectomy

Risk factors: Prior TACE non responder, surgery due to cirrhosis contraindicated,
prior evaluation showed perfect tumor-to-liver ration in uptake, no relevant extrahepatic deposition or lung shunt, no extrahepatic disease, bridging to transplant



T2w *T1w arterial (from dynamic)* *T1w HBP*

Procedural steps:

1. Arterial puncture right groin

2. Insertion 5F-sheath. (5F Radiofucus Introducer, TERUMO)

3. Cannulation of the hepatic common artery origin from the mesenteric artery as a anatomical variant, (4F SIM 1 Super Torque, CORDIS)

4. Cannulation of the right hepatic artery using microcatheter (Progreat 2.7F, TERUMO)

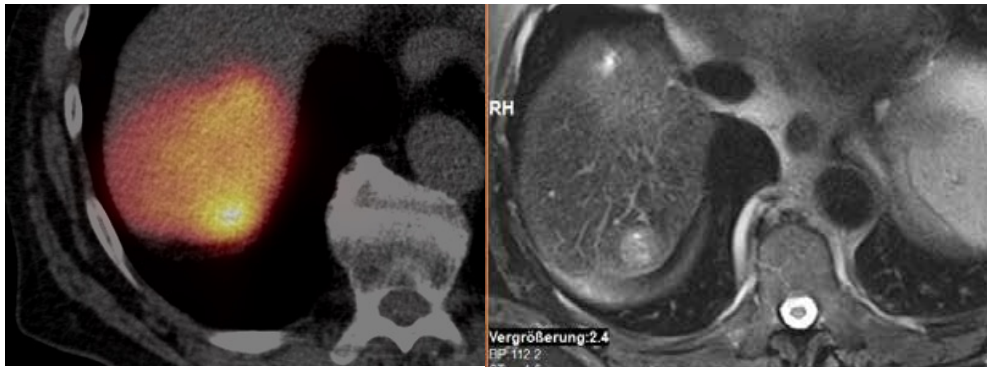
5. Advance microcatheter to segment artry VII with dominant tumor supply

6. Application of the calculated therapeutic dose of 0.5GBq Theraspheres (>350Gy tumor dose), Therasphere (BOSTON SCIENTIFIC)

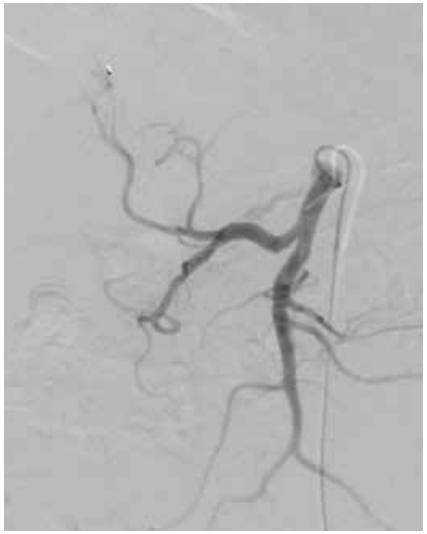
7. Removal of all catheters

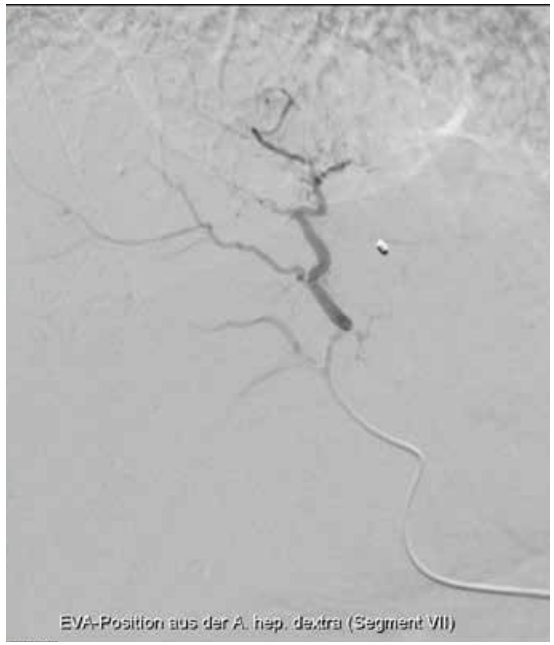
8. Vascular closure device right groin (Exoseal 5 F/CORDIS)

Radio-Segment-Ectomy S VII in HCC *(cont.)*



Tumor volume:	*5ml*
Lobe volume:	*125ml*
Total liver volume:	*1100ml*
Lung shunt:	*5%*
Estimated activity:	*0.5 GBq Therasphere®/Boston*
Calculated tumor dose:	*>350Gy*





Recurrent varicosis right leg and vulva varicosis due to pelvic congestion syndrome right ovarian vein

Operators: Nils Kucher, Erik Holy

Clinical data: Chronic venous insufficiency with recurrent symptomatic leg and vulva varicosis
History of embolization therapy of ovarian veins and right internal iliac vein
History of crossectomy and stripping of right great saphenous vein
History of foam sclerotherapy varicosities right leg

Risk factors: Duplex: nutcracker anatomy *(image 2)*, no May Thurner anatomy,
right ovarian vein dilated with reflux
MRV: nutcracker, no May Thurner, both ovarian veins dilated and recanalized *(image 1)*
PCS Score (Kucher): 5 point

Procedural steps:

1. Access right IJ ultrasound guided 5F

2. Use 5F vertebral catheter or multipurpose catheter for selective venography of left renal vein and ovarian veins

3. Valsalva venograms to both ovarian veins

4. Catheter-directed sclerotheraphy to parauterine veins during Valsalva (Aethoxysclerol 3%)

5. Coil embolization right ovarian vein and possibly left ovarian vein if reflux is present (Interlock, BOSTON SCIENTIFIC) in Sandwich-technique

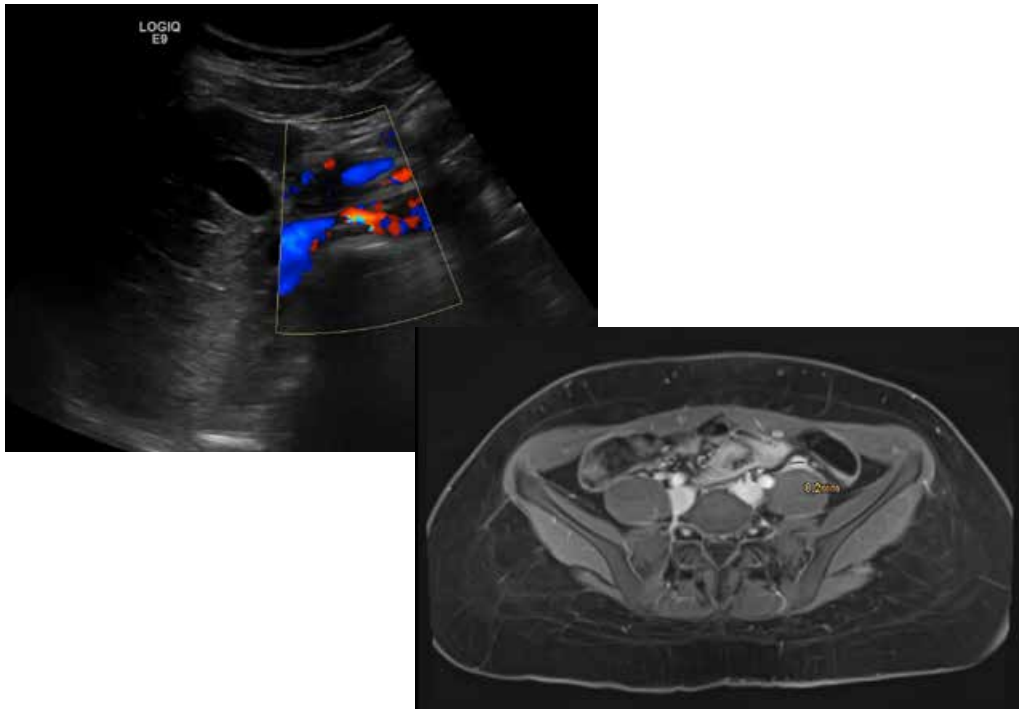
Case 18 – Zurich 02: Female, 17 years (A-Y-E)

Pelvic congestion syndrome with nutcracker anatomy and left ovarian vein reflux in a nulliparous adolescent

Operators: Nils Kucher, Erik Holy

Clinical data: lower abdominal pain, aggravated by menstruation and upright position
Suspected endometriosis not confirmed, hormon treatment without improvement
No hematuria, no flank pain, no venous claudication
Pollakisuria
PCS score (Kucher): 5 points

Risk factors: Duplex: mild May Thurner anatomy, no reflux to left internal iliac vein, nutcracker anatomy with dilated left ovarian vein with reflux *(image 1)*
MRV: nutcracker anatomy with dilated left ovarian vein (8mm)



Procedural steps:

1. Venous access to right IJ ultrasound guided 6F

2. Selective venography with and without Valsalva of left renal vein

3. If no left renal flow into IVC is visible, may consider transient balloon occlusion of left ovarian vein with simultaneous selective venography of left renal vein (requires second venous access)

4. Foam sclerotheraphy (aethoxysclerol 3%) to parauterine veins

5. Coil embolization left renal vein (Interlock BOSTON SCIENTIFIC) in Sandwich technique

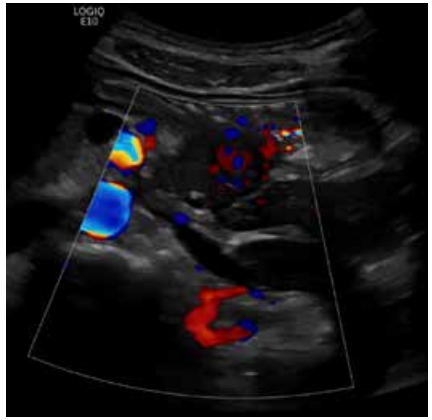
Case 19 – Zurich 03: Female, 21 years (A-B)

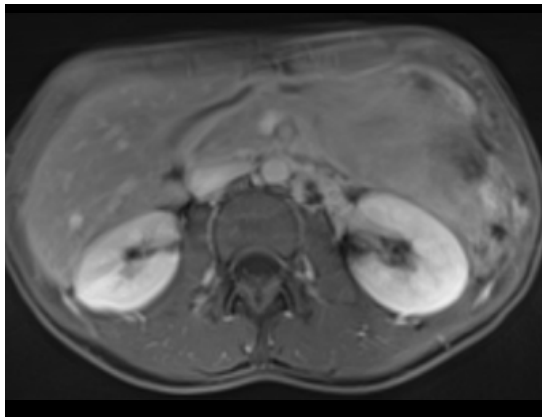
Persistent severe nutcracker syndrome post surgical transposition of the left renal vein and ligation of left ovarian vein

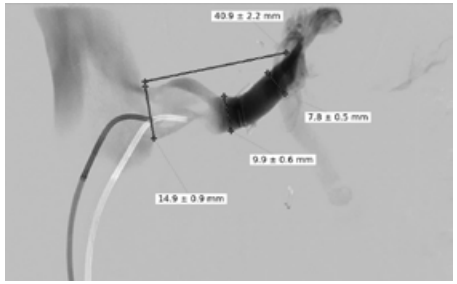
Operators: Nils Kucher, Erik Holy

Clinical data: Left flank pain accompanied with hematuria
History of non-thrombotic May Thurner Syndrome treated with Beyond stent with improvement of lower abdominal pain and leg claudication 10/2021
History of transposition of the left renal vein and ovarian vein ligation 12/2021
History of ballon angioplasty of left renal vein with no imrpovement of nutcracker syndrome 05/2022

Risk factors: Duplex: severe nutcracker with no flow in left renal vein *(image 1)*
MRV: severe nutcracker with recanalized left ovarian vein *(image 2)*
Venography: severe nutcracker with recanalized left ovarian vein *(image 3)*







Procedural steps:

1. Venous access ultrasound guided puncture 10F right CFV

2. Selective venography left renal vein using Cobra 5 F catheter. May use IVUS

3. Left renal vein stenting (Arbre Stent, MEDTRONIC) or Wallstent (BOSTON SCIENTIFIC) or Epic Stent (BOSTON SCIENTIFIC)

4. Postdilatation to 12 mm (Mustang, BOSTON SCIENTIFIC). May use IVUS to rule out stent compression

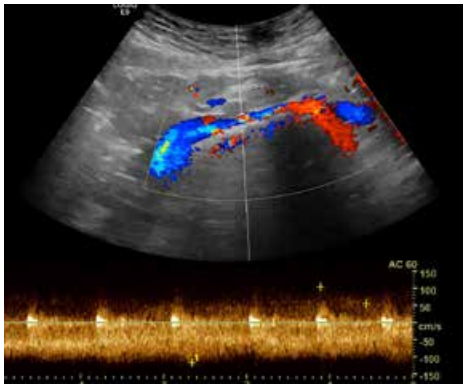
Case 20 – Zurich 04: Female, 18 years (A-K-P)

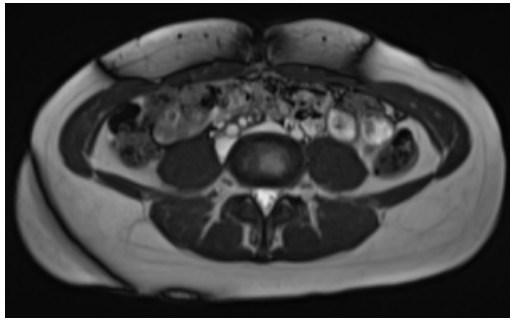
Pelvic congestion snydrome due to non-thrombotic May Thurner anatomy

Operators: Nils Kucher, Erik Holy

Clinical data: Lower abdominal pain with aggravation during exercise and upright position
Pain radiation to left groin and venous claudication during exercise left leg
Pollakisuria

Risk factors: Known endometriosis post laparoscopic removal 6/2020 with no improvement of symptoms
Treadmill test with 12% inclination, 3,2 km/h: lower abdominal pain after 70 meter, pain left groin and left leg after 150 meter. Venous claudication persists after termination of exercise.
Duplex: No nutcracker but May Thurner anatomy (image 1), spontaneous permanent retrograde flow in left internal iliac vein
MRV: May Thurner anatomy





Procedural steps:

1. Venous access ultrasound guided 10 F left CFV

2. Venography left common iliac vein

3. IVUS May Thurner

4. Sinus obliquus stent into May Thurner lesion (OPTIMED)

5. IVUS

Case 21 – Jena 02: Female, 52 years (S-A)

Trans-jugulary-intrahepatic portosystemic stent shunt (TIPSS) in refractory ascites and Child C cirrhosis

Operators: René Aschenbach, Florian Bürckenmeyer

Clinical data: Child C cirrhosis with ascites, otherwise refractory to therapy

Risk factors: CT confirmed cirrhosis and patency of the right hepatic vein,
rule out of HCC in estimated puncture tract, no PVT, no large cysts

Pictures
will be available soon!

Procedural steps:

1. Ultra-sound guided puncture of right jugulary vein

2. Insertion of Flexor Check Flo II Introducer Set 10F (COOK)

3. Cannulation of right hepatic vein using Turcon NB Advance Catheter (COOK)
TIPS-Configuration and road-runner guide wire 0.018" (COOK)

4. Advancing introducer-sheath into right hepatic vein using Amplatzer super stiff wire (BOSTON SCIENTIFIC)

5. Ultrasound-guided puncture of intrahepatic right portal vein
using Transjugulary liver access and biopsy Needle Set (COOK)

6. Advancing diagnostic catheter into portal vein using
PIG-Vessel sizing catheter-20B UHF (MERIT MEDICAL) to define lenght of TIPSS-Stentgraft

7. Measurement of pressure in inferior caval vein, right hepatic vein and portal vein

8. Dilatation of liver-tract using Passeo 35-XEO 8mm (BIOTRONIK) and
advancement of the transjugulary sheath into the portal vein

9. Implantation of Viatorr 8-10 mm controlled expandable stentgraft (GORE)
and repeating of pressure measurement, target pressure of <10mm Hg for HVPG

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Wednesday,
8 June 2022

Case 22 – Chengdu, China 01: Female, late 50s (D-L)

Chronic occlusion of the right PA and stenosis of the left PA

Operators: Jichun Zhao, Fei Xiong, Bin Huang, Hankui Hu

Clinical data: Intermittent claudication of both lower limbs for 12 years,
rest pain for 3 months, ulcer in left hallux, wound after right BK amputation is unable to heal 3 months, ulcer in left hallux, wound after right BK amputation is unable to heal

Risk factors: Hypertension.
Present state: Ulcer in left hallux, non-healing wound in right keen
CTA: Occlusion of right PA, and stenosis of left PA with serious calcification

Procedural steps:

1. Both femoral access (5F)

2. Lesion crossing: 0.018“ V18, (BOSTON SCIENTIFIC),0.014“ GAIA (ASAHI). 0.018 “ Seeker support catheter (BD) if needed

3. Balloon dilation: Chocolate: 4×60, 4×80, 4×120 (MEDTRONIC)

4. DCB: IN.PACT Admiral DCB: 4×60,4×80, 4×120 (MEDTRONIC)

5. BTK: Sterling 3×150 (BOSTON SCIENTIFIC), Saber 2.5×250, 2×250 (CORDIS) if needed.

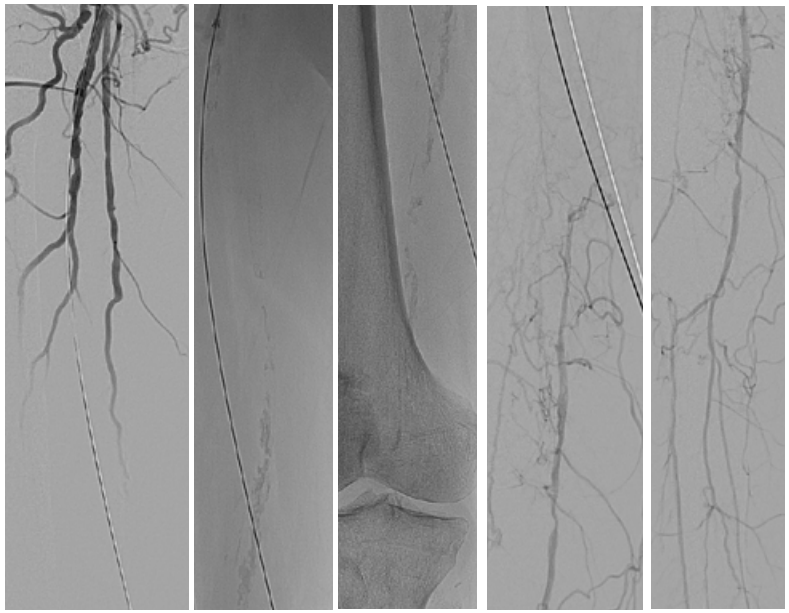
Case 23 – LEI 07: Male, 71 years (R-R)

Complex CTO right femoropopliteal, CLI-Patient

Operators: Andrej Schmidt and Axel Fischer

Clinical data: Ulcerations right forefoot and heel, severe claudication,
maxmial walking capacity 100 meters, ABI right 0,41, Rutherford class 6
CLI with endovascular treatment left leg 5/2022
Chronic renal insufficiency, GFR 57mm/min
Diabetes mellitus type 2, Hypertension, Former smoker

Risk factors: Angiography during PTA left leg showing diffuse disease of the right femoropopliteal tract, Severe calcifications



Procedural steps:

1. 7Fr Cross-over approach from left to right
- 7Fr 40cm Balkin Up&Over Sheath (COOK)

2. Antegrade guidewire-passage:
- Command 18 300cm Guidewire (ABBOTT)
- 0.035"" Guidewire Straight 260cm (TERUMO)
- 0.035"" QuickCross Support Catheter 130cm (PHILIPS)

3. In case of failure to pass into the true lumen distal to the CTO
- GoBack Crossing-Catheter, 4Fr-120cm (UPSTREAM PERIPHERAL)

4. Vessel-preparation and DCB-angioplasty
- Ultrascore 5/200 Scoring-Balloon (BD)
- Orchid Drug-Coated Balloons 5.0mm/120mm (ACOTEC)

5. Stenting on indication
- Supera Interwoven Nitinol-Stent (ABBOTT)

Case 24 – LEI 08: Male, 71 years (A-S)

High-grade Internal Carotid Artery Stenosis

Operators: Andrej Schmidt and Sandra Düsing

Clinical data: Progressive internal carotid artery stenosis right
– 4.8m/sec. flow-velocity (3.2m/sec. 2021)
CAD, PTCA 2016 and 2021
COPD

Risk factors: Duplex-sonography 4.8m/sec.

Pictures will be available soon!

Procedural steps:

1. Right groin access
- 5F Judkins Right diagnostic catheter (CORDIS)
- 0.035"" SupreCore Guidewire 300cm (ABBOTT
- 7Fr 90cm Check Flo Performer Sheath (COOK)

2. Cerebral protection
- Filterwire EZ (BOSTON SCIENTIFFIC)

3. Predilatation
- Armada XT 4.0/20mm Rapid Exchange Balloon (ABBOTT)

4. Stentimplantation
- 8/30mm CGuard Stent (InspireMD)

5. Postdilatation in indication
- Sterling Rapid Exchange Balloon 5.0/20mm (BOSTON SCIENTIFIC)

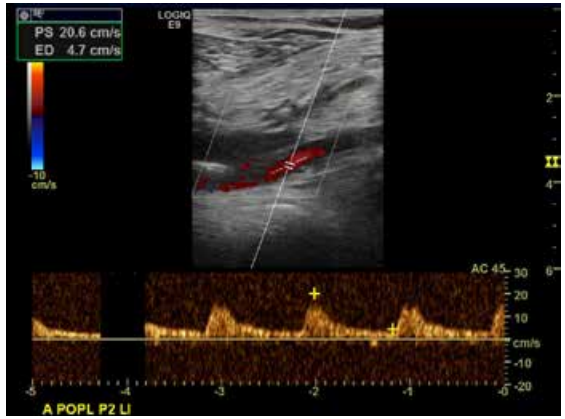
Case 25 – Zurich 05: Male, 72 years (K-G)

Endovascular Treatment of chronic superficial femory artery stent occlusion

Operators: Nils Kucher, Erik Holy

Clinical data: Symptomatic PAD of the left lower leg since 01/2022,
currently worsening and Fontaine stage IIb (100 m)

Risk factors: CVRF: former smoker, Dyslipidemia
Left SFA: PTA/Stenting chronic occlusion 2018, PTA in 2019 Stent restenosis,
PTA/DEB/Stenting 2021 In-Stent occlusion (currently on DAPT)
TEA and resection of a right CFA anuerysm 2018
Duplex 05/2022 *(Figure 1 and 2)*: occluded Stent,
reconstitution of distal popliteal artery via collateral vessels



Procedural steps:

1. Antegrade access left CFA (6 F)

2. Diagnostic angiography

3. Catheter supported recanalisation of SFA occlusion

4. Rotarex Atherectomy (6F or 8F) (BD)

5. PTA +/- stenting of SFA/popliteal artery

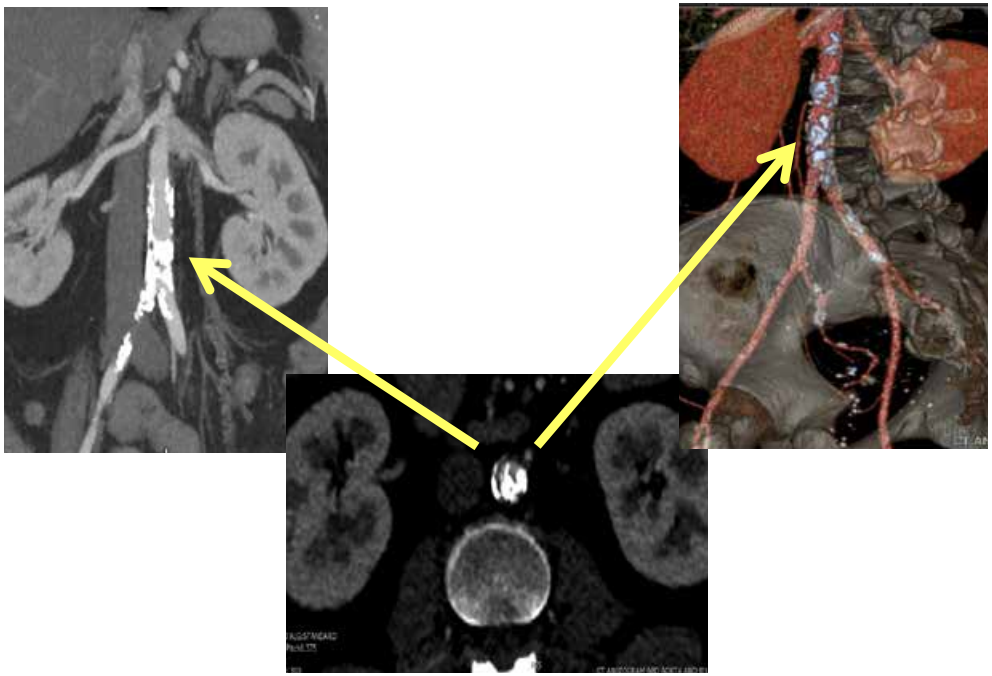
Case 26 – Kingsport, USA 01: Female, 51 years (JDD)

Complex calcified aortic disease in a patient with severe claudication and CLI

Operators: Chris Metzger

Clinical data: Severe bilateral hip and buttock claudiaction @ 50'; embolic events with amputation of toes bilaterally

Risk factors: *CAD with prior MI and DES's; *NIDDM; *Hypertension; *ongoing tobacco use; *dyslipidemia; ABI's: R 0.66>0.24 with exercise; L 0.64>0.25 with exercise; *CTA: 90% severely calcified distal aorta, 50–75% calcified common iliac arteries, no significant infra-inguinal disease



Procedural steps:

1. Vascular ultrasound – assisted micropuncture access bilaterally

2. Intravascular ultrasound/ IVUS (PHILIPS Volcano)

3. "Kissing" Shockwave X2 in aorta (SHOCKWAVE Medical)

4. Abre 16X60 nitinol stent (MEDTRONIC)
OR Viabahn BX 11X39 covered stent (W. L. GORE)

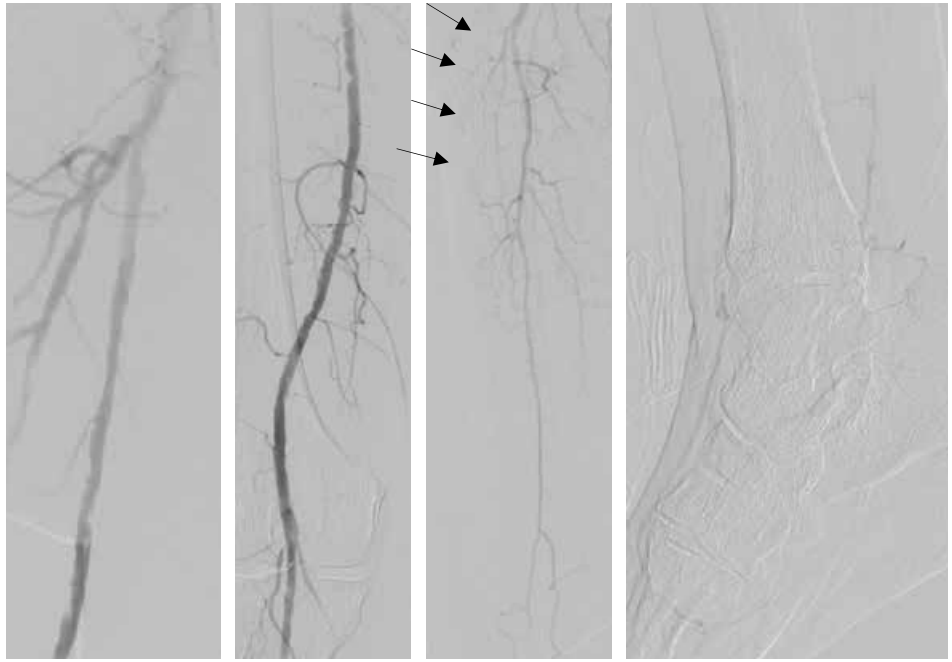
5. Viabahn BX covered stents right and left common iliacs (W. L. GORE)

Case 27 – LEI 09: Male, 64 years (HJ-G)

Complex BTK-CTO right, CLI-Patient

Operators: Andrej Schmidt and Axel Fischer

Clinical data: Critical Limb Ischemia right, ulcerations rigth forefoot,
ABI right 0.32, Rutherford class V
CAD, CABG 2018
Diabetes mellitus type 2
Chronic renal insufficiency, GFR 49ml/min
PTA / stenting BTK right 2/2020 (ATA and peroneal artery)
Angiography and unsuccessful recanalization attempt elsewhere



Procedural steps:

1. Rigth groin antegrade access and retrograde anterior tibial artery access
- 6Fr 55cm sheath (COOK)
- Micropuncture pedal access kit (COOK)

2. Antegrade and retrograde wiring of the anterior tib. art. CTO
- Connect 250 T 0.018"" Guidewire 300cm (ABBOTT)
- Winn 200 T 0.014"" 300cm Guidewire (ABBOTT)

3. Predilatation / vessel-preparation
- Chocolate balloon 3.0/100 (MEDTRONIC)

4. Drug-coated balloon angioplasty
- Litos 0.014"" Drug-Coated Balloon (ACOTEC)

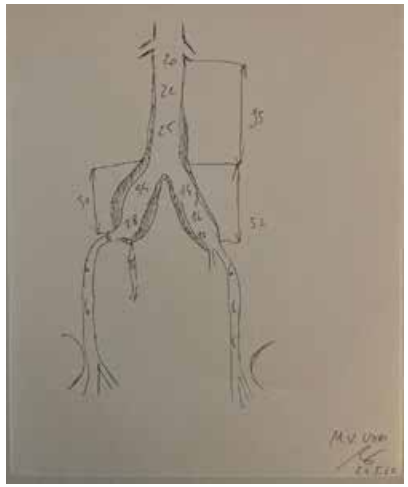
Case 28 – Münster 05: Male, 71 years (R-L)

IBD for common iliac aneurysm with internal artery stenosis and buttock claudication

Operators: Marco Virgilio Usai, Efthymios Beropoulis

Clinical data: Healthy patient with casually diagnosed iliac aneurysm on the right side because of buttock claudication when going upstairs after few meters

Risk factors: Arterial hypertension, otherwise healthy. On CT 3,5 cm Iliac aneurysm on the right side with high grade stenosis of the internal iliac



Procedural steps:

1. Percutaneous bilateral femoral access with Prostar XL (ABBOTT)

2. Introducing 14 F Sheath (COOK) on the right side and a 12 F flexor (COOK) Sheath on the left. Change on the rigth side to a Lunderquist wire.

3. Retrograde Angiography in 35' LAO to localise the internal ilic artery.

4. Introducing the IBD device, over the right side Creation of a through and through wire with the Help of Indy Snare (COOK) and a TERUMO 35 260 cm stiff wire.

5. Releasing the graft until the sidebranch is free. Push in cross over of the 12 F sheat.

6. Cannulation of the internal artery after angiographic control with Bern (MERIT) and a 35 TERUMO stiff.

7. Predilatation of the internal artery to reduce the stenosis. Change to a Rosenwire (COOK)

8. Implantation og a 8x59 VBX (GORE). Withdrawal of the Through and Through Wire and completion fo the IBD deployment.

9. Deployment of the Aortic main Graft (COOK), cannulation of the controlateral leg and deployment of the iliac extension (COOK), then deployment of the ipsilateral with Cool Iliac.

10. Angiography and closure of the Prostar XL.

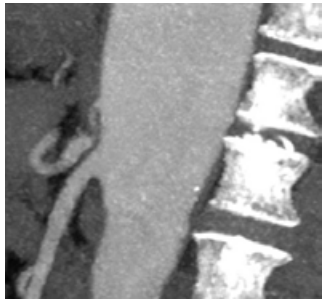
Case 29 – Hamburg 01: Female, 56 years (M-J)

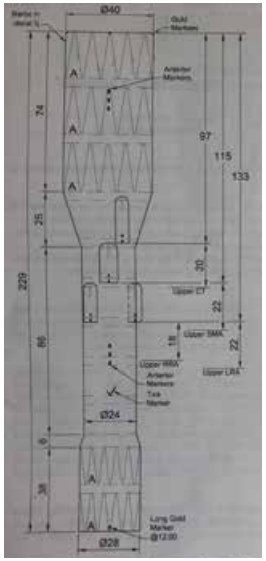
Low profile branched EVAR in TAAA

Operators: Fiona Rohlffs, Gesche Homfeldt

Clinical data: TAAA (max. diameter 7cm)
past medical history:
Frozen Elephant-Trunk 2021
ascendens replacement 2019

Risk factors: Small access and target vessels, kinked anatomy
Pseudo-occluded celiac trunk, hepartic artery from SMA
History of right axillary artery occlusion with stenting
Liquordrainage





Procedural steps:

1. Percutaneous femoral access (Prostar, ABBOTT)

2. Lunderquistwire (extra stiff wire, COOK) to ascending aorta from right side, angiocatheter from left side

3. Deployment of low profile TEVAR and low profile branched graft (CMD, COOK)

4. Transfemoral retrograde access to antegrade branches with steerable sheeth (Fustar sheeth 10F/70cm, LaMed) and placement of bridging stents (Viabahn/VBX, GORE; Advanta V12, GETINGE; VisiPro stent, MEDTRONIC; Fluency, BD)

5. Completion angiogramme

Case 30 – LEI 10: Male, 76 years (W-K)

Thoracoabdominal Aneurysm Crawford III, BEVAR

Operators: Andrej Schmidt and Daniela Branzan

Clinical data: Symptomatic thoracoabdominal aneurysm, Crawford III,
Recurrent abdominal pain
Maximal diameter of the aneurysm 68 mm
Preemptive embolization of the inferior mesenteric artery
Renal insufficiency GFR 65ml/min
CAD

Risk factors: CT-angiography

Procedural steps:

1. Left axillary percutanous access
- 12Fr-45 sheath (COOK)

2. Bilateral groin access and preloading of closure-devices
- Perclose ProStyle SMCR System (ABBOTT)

3. Implantation of a branched throcaoabdominal off-the-shelf device
- E-nside TAA Multibranch Stentgraft System (ARTIVION)

4. Snaring of preloaded guidwires to facilitate antegrade access to the inner branches
- Plywire 0.018"" 400cm (OPTIMED)
- CloverSnare 4-Loop Vascular Retriever (COOK)

5. Transaxillary implantation of bridging covererd stents into visceral and renal arteries
- iCover PTFE Covered Stent System (iVASCULAR)

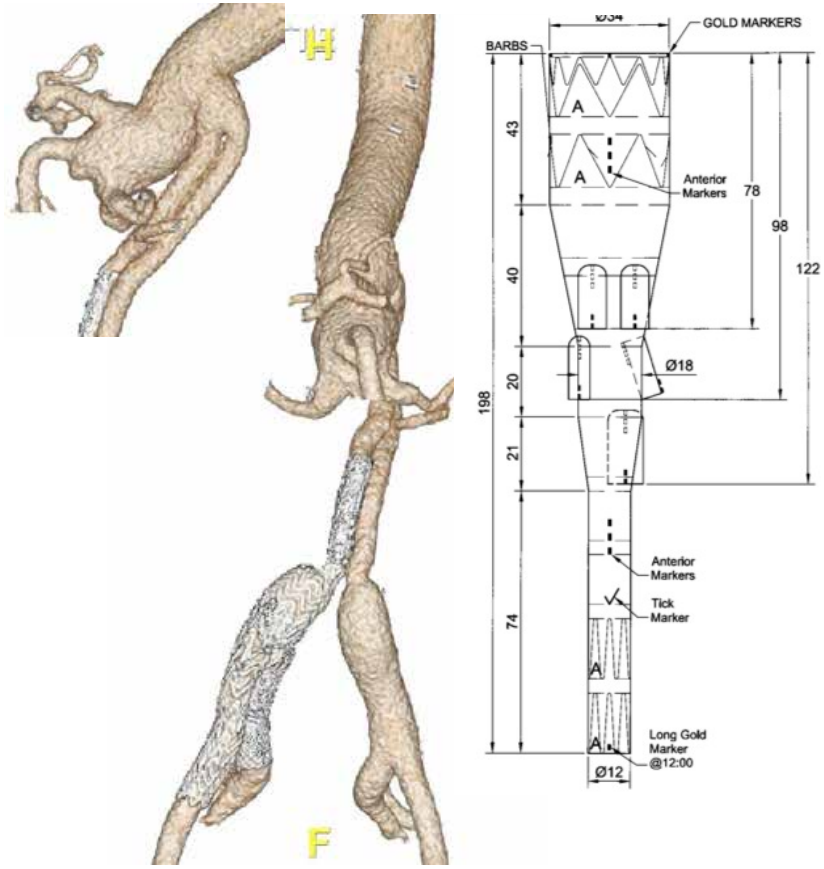
6. Impantation of an off-the-shelf bifurcated stentgraft
- E-tegra bifurcated stentgraft (ARTIVION)

Case 31 – Paris 01: Female, 62 years, Obese, ASA 3

BEVAR for 60mm visceral patch aneurysm

Operators: Stéphan Haulon, Thomas Le Houérou, Antoine Gaudin, Côme Bosse, Sean Crawford, Dominique Fabre

Clinical data: 2008 open TAAA repair, 2017 open ascending aorta repair,
2019 endo branched right common iliac repair



Procedural steps:

1. Percutaneous axillary and femoral approach

2. Implantation of branched endograft

3. Catherization and stenting of 5 branches from axillary access

4. Completion angiogram and CBCT

Devices:
- COOK CMD endograft
- Begraft + bridging stents (BENTLEY)
- Viabahn bridging stents (GORE)

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LINC

Thursday,
9 June 2022

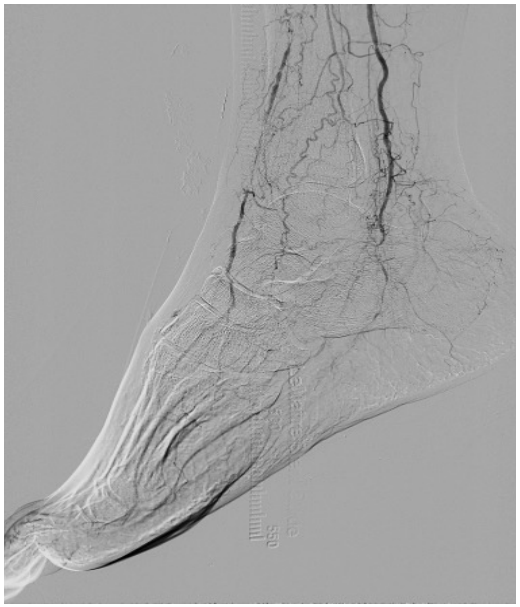
Case 32 – Amagasaki 01: Male, 57 years (S-K)

Long total occulusion of ATA with severe calcification

Operators: Osamu Iida, Yosuke Hata, Taku Toyoshima, Naoko Higashino

Clinical data:
· Nov/2021: drug coated balloon for left popliteal stenosis
· April/2021: drug coated balloon for right SFA stenosis, plain angioplasty for tibial-peroneal trunk
· Previous amputation for right toe thumb

Risk factors: Hypertension, Type II diabetes, Dislipidemia, Hemodialysis, Coronary artery disease
· Skin perfusion pressure: dorsal 24mmHg, plantar 22mmHg
· WIFI classification: W 1, I 3, fl 0



Procedural steps:

1. Ipsilateral antegrade approach from rt CFA with 5Fr sheath

2. Retrograde approach from dorsal pedis artery with micro catheter if antegrade approach is failed

3. Wire: 0.014 inch Regalia, Gladius (ASAHI INTECC), 0.035 inch GLIDEWIRE® Baby-J™ Hydrophilic Coated Guidewire (TERUMO)

4. Support catheter: CXI 4Fr (COOK), Armet (ASAHI INTECC)

5. Support catheter: CXI 4Fr (COOK), Armet (ASAHI INTECC)

6. Imaging modality: intravascular ultrasound (TERUMO)

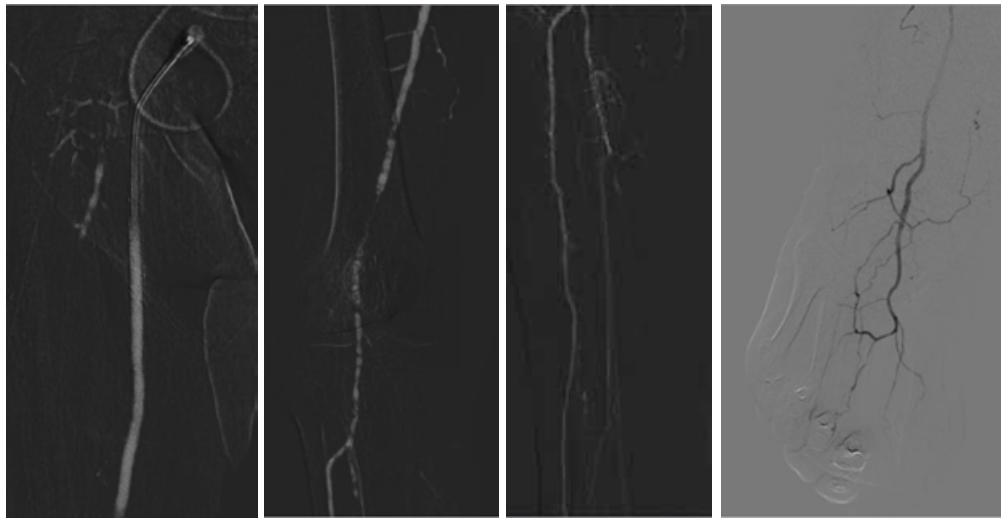
7. Treatment: Plain balloon angioplasty (IVUS-guided decision)

Case 33 – Abano Terme 01: Male, 81 years (G-F)

BTK: Long PT occlusion

Operators: Marco Manzi, Salvatore Esposito, Cesare Brigato

Clinical data: Type 2 DM, ischemic cardiopathy, neurovasculopathy, dyslipedemia, obesity
wet gangrene right III° toe
TcPO2 = 20 mmHg



Procedural steps:

1. US guided antegrade 6F sheath

2. CO2 angio and 2D perfusion of the foot

3. Antegrade CTO crossing 0,18/0,14 wires

4. Retrograde with/without puncture (transloop) whenever failure

5. POBA, DEB and dedicated stents

■ Ranger (BOSTON SCIENTIFIC) or
Lutonix DCB (BD)

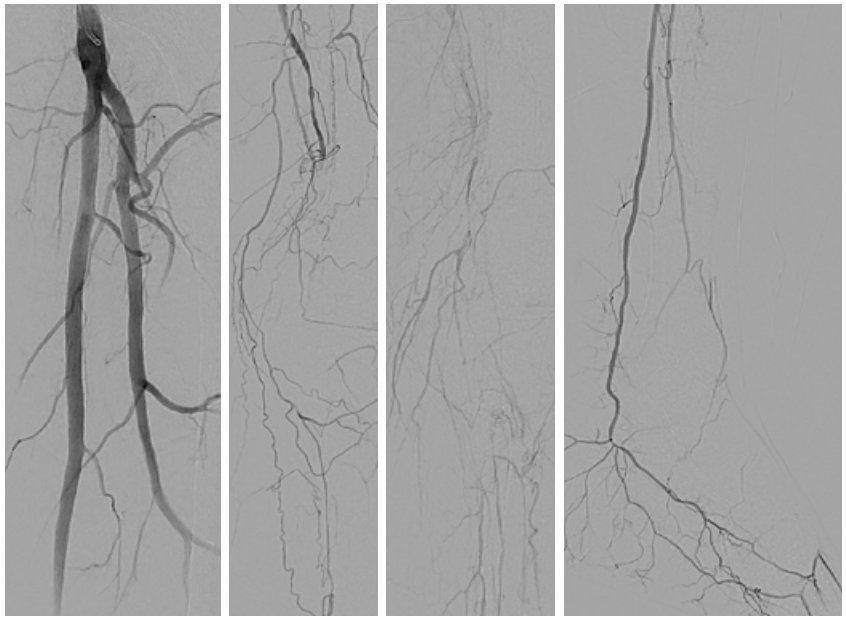
Case 34 – LEI 11: Male, 63 years (N-V)

Complex popliteal CTO, CLI

Operators: Andrej Schmidt and Axel Fischer

Clinical data: Multiple small ulcerations left lower leg, restpain left foot, walking capacity 20 meters,
ABI left 0.2; Rutherford VI
CAD, PTCA 2021

Risk factors: Angiography elsewhere showing a long popliteal occlusion left
Diabetes mellitus type 2
Hypertension
Former smoker



Procedural steps:

1. Left antegrade access
- 6Fr 55cm sheath (COOK)

2. Retrograde posterior tibial, peroneal or anterior tibial access
- Micropuncture Pedal Access Kit (COOK)

3. Antegrade and retrograde intraluminal wiring
- Hydro ST 0.014"" Guidewire 300cm (COOK)
- Approach CTO 0.014"" Guidewire 300cm (COOK)
- CXI Support-Catheter 0.018"" 90cm angled (COOK)

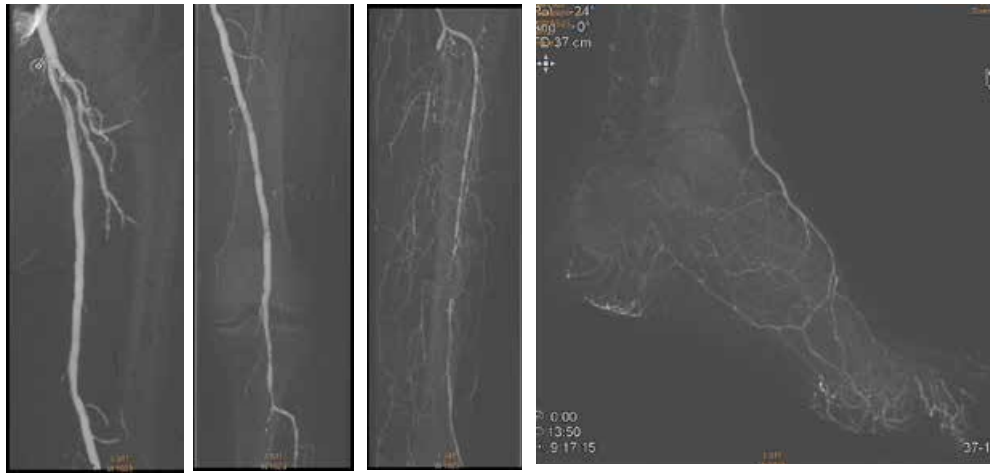
4. Balloon-angioplasty
- Advance Serenity 14 (COOK)
- Micro 14 Angioplasty Balloon (in case of retrograde ballooning) (COOK)

Case 35 – Abano Terme 02: Male, 61 years (G-F)

BTK/BTA: Long PT/plantar occlusion

Operators: Marco Manzi, Salvatore Esposito, Cesare Brigato

Clinical data: Type 2 DM; ischemic cardiopathy; heart failure; dyslipedemia; obesity;
previous controlateral chopart amputation; Fontaine IV; Rutherford 5
Deep heel ulcer, moderate ischemia, mild infection
WIFI: W3 I2 Fi1



Procedural steps:

1. US guided antegrade 6F sheath
2. CO2 angio and 2D perfusion of the foot
3. Recanalization anterior and posterior tibial arteries CTO 0,018 /0,014 wires
4. Predilatation if needed and POBA; DEB and dedicated stents discussion
5. US guided Closure device deployment

- Ranger (BOSTON SCIENTIFIC) or
Lutonix DCB (BD)

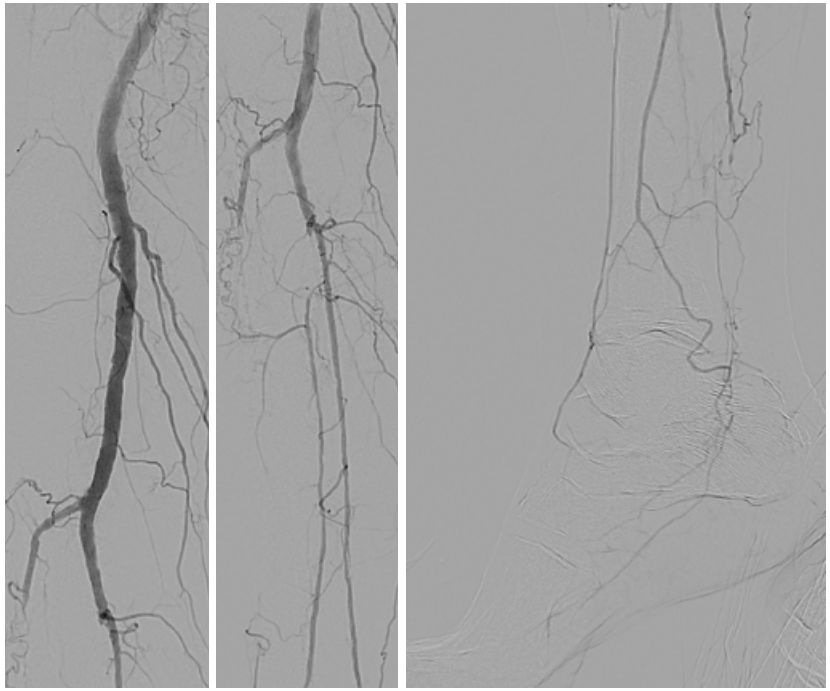
Case 36 – LEI 12: Male, 71 years (J-S)

Pedal recanalization for limb threatenting ischemia

Operators: Andrej Schmidt and Sandra Düsing

Clinical data: Ulceration right forefoot, acute worsening 6 weeks ago,
Recanalization of an acute occlusion of the popliteal artery right 4/2022
Unsuccessful guidewire-passage into pedal arteries (posterior tibial artery)

Risk factors: Angiography 6 weeks before showing the popliteal artery occlusion, recanalization and remaining distal tibial artery occlusions, and angiography after additional thrombolysis showing chronic distal tibial and pedal occlusions.
ABI right 0



Procedural steps:

1. Antegrade access right groin
- 6Fr 50cm sheath (COOK)

2. Guidewire-passage of the posterior tibial artery occlusion
- 0.014"" Command ES 300cm (ABBOTT)
- 0.014"" Winn 200T 300cm (ABBOTT)
- Command 18, 300cm (ABBOTT)

3. Atherectomy / thrombectomy (peroneal artery and posterior artery occlusion)
- Excimer-laser 1.4mm (PHILIPS)

4. Balloon-Angioplasty /DCB-PTA
- Armada 14 2.5/120mm (ABBOTT)
- Litos Drug-Coated Balloon 3.0/120mm (ACOTEC)

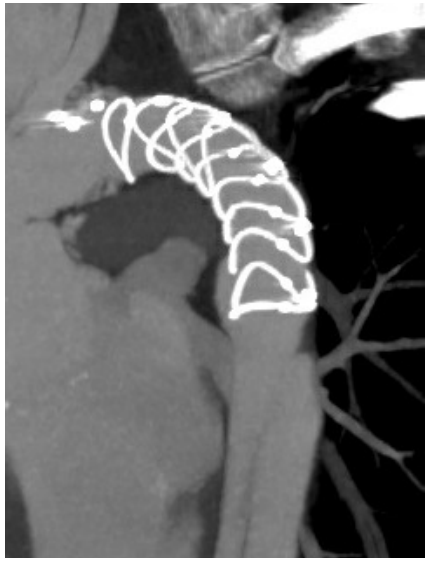
Case 37 – Hamburg 02: Male, 36 years (J-M)

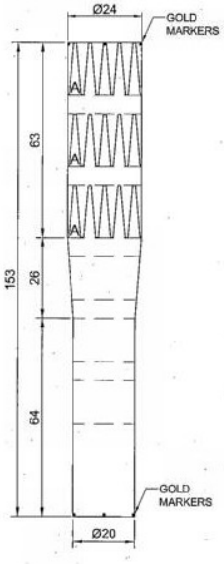
TEVAR (CMD TEVAR, low-radial force distally)

Operators: Fiona Rohlffs, Gesche Homfeldt

Clinical data: Type A aortic dissection with David Procedur and Frozen Elephant Trunk 2021

Risk factors: TGFB3 gene variation





Procedural steps:

1. Percutaneous femoral access (Manta, TELEFLEX)

2. Confirmation of true lumen access (angiogramm)

3. Lunderquistwire (extra stiff wire, COOK) to ascending aorta from right side, angiocatheter from left side

4. Deployment of CMD-TEVAR (COOK)

5. Completion angiogramm

Case 38 – Leipzig – Heart Center Leipzig 01: Female, 73 years (B-M)

Frozen elefant trunk with new hybrid prosthesis

Operators: Martin Misfeld, Christian Etz

Clinical data: Aortic arch aneurysm

Risk factors: Advanced age----------E-vita Open Neo Hybrid Prothesis (ARTIVION)

Pictures will be available soon!

Procedural steps:

1. Cardio-pulmonary-bypass 8CPB

2. Procedure performed in hypothermia

3. Selective cerebral perfusion

4. E-vita Open Neo Hybrid prothesis (ARTIVION) implantation in zone 2

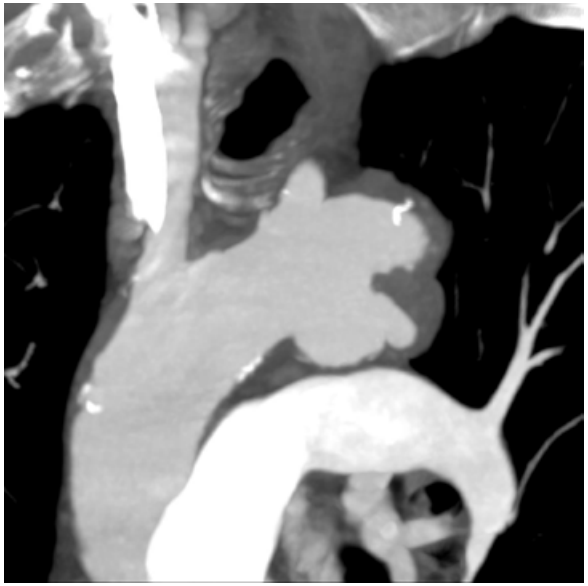
5. Extra-anatomical bypass to left subclavian artery

6. Rewarming and weaning from CBP

BEVAR for Arch penetrating ulcer

Operators: Stéphan Haulon, Thomas Le Houérou, Antoine Gaudin, Côme Bosse, Sean Crawford, Dominique Fabre

Clinical data: Severe COPD, ASA 3



Procedural steps:

1. Percutaneous right axillary and femoral access
2. RV access from right femoral vein
3. LV access from right femoral artery
4. Deployement of the branched endograft under rapid pacing
5. Deployement of inominate artery bridging limb from right axillary access
6. Access and deployement of LCC and LSA bridging stents from the groin
7. Completion angiogram and CBCT

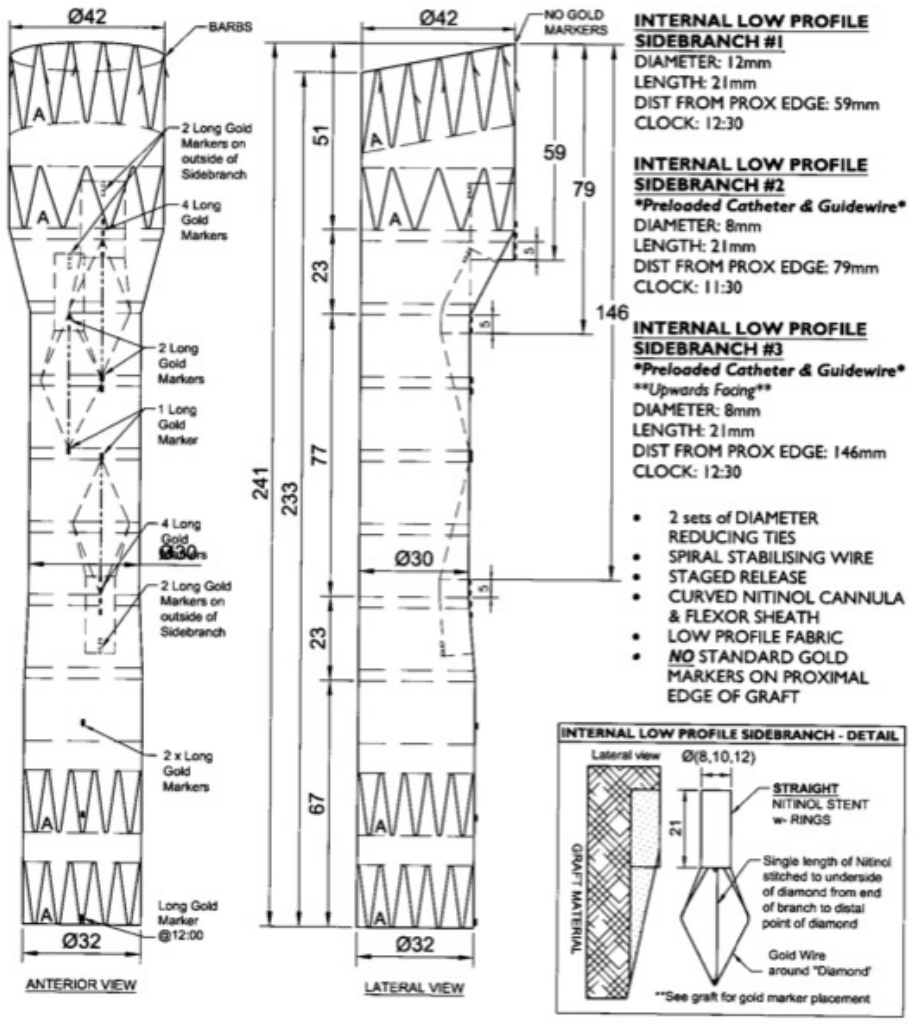
Devices:

- COOK CMD endograft
- Begraft + bridging stents (BENTLEY)
- Viabahn bridging stents (GORE)

Thursday, 11:25 – 11:55 ***Live from Paris*** **Main Arena 2 · Room 2**

Case 39 – Paris 02: Male, 73 years

BEVAR for Arch penetrating ulcer *(cont.)*



Case 40 – LEI 13: Male, 72 years (T-F)

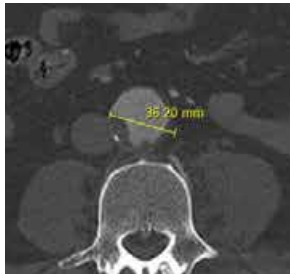
Infarenal aortoiliac aneurysm, EVAR with IBD

Operators: Andrej Schmidt and Axel Fischer

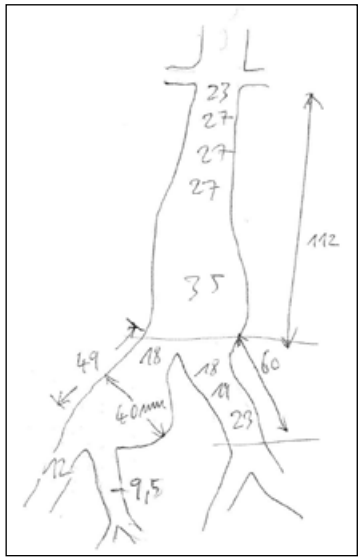
Clinical data: Incidental finding of an infrarenal aortic aneurysm with extension to the left common iliac artery, maximal diameter 42mm
Resuscitation during general anaesthesia for surgery of prostatic cancer 2015
Coilembolization of aortic sidebranches to prevent type II endoleaks 4/2022

Risk factors: CAD, PTCA 2016
Prostatic cancer 2015
Hypertension

Right common iliac artery



Infrarenal aorta



Procedural steps:

1. Treatment under local anaesthesia
- Bilateral femoral access with preloading of 2 ProStyle-systems per groin (ABBOTT)

2. Placement of super-stiff guidewires bilateral and sheaths
- Lunderquist 0.038"" 260cm Guidewire (COOK)
- 12 Fr-45cm sheath left groin (GORE)
- 22Fr-33cm sheath right groin (GORE)

3. Snaring of a 0.018"" support-guidewire accross the aorto-iliac bifurcation
- 0.018"" V-18 Control Guidewire 300cm (BOSTON SCIENTIFIC)
- 10mm Amplatz Goose Neck Snare Kit (MEDTRONIC)

4. Insertion of the sidebranch device right iliac axis
- IBD 23mm-14.5mm (GORE)

5. Cross-over insertion of the sidebranch graft
- internal iliac ectension 16-14.5-70mm (GORE)

6. Implantation of the infrarenal bifurcated stentgraft
- C3 28-14.5-140mm (GORE)

7. Bridging to the IBD left and extension to the right common iliac artery
- 16-27-100mm (GORE) right
- 16-23-120mm (GORE) left

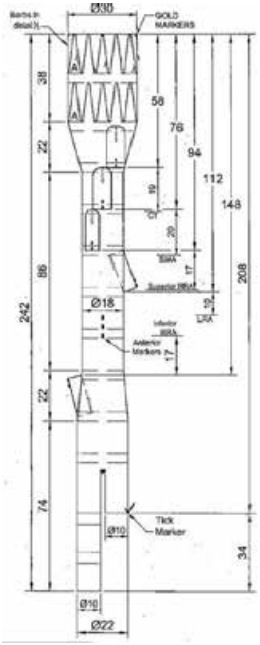
Case 41 – Hamburg 03: Female, 68 years (G-M)

TEVAR extension and 5-branched EVAR with fenestration of the dissection membrane

Operators: Fiona Rohlffs, Gesche Homfeldt

Clinical data: Chronic Type B Aortic dissection with Type Ia endoleak and progression of false lumen aneurysm
Past medical history:
Carotid-subclavian-bypass and TEVAR religning in 2022
first TEVAR 2020

Risk factors: FBN2-mutation
Two right renal arteries from false lumen, lower renal artery with dissection



Procedural steps:

1. Percutaneous femoral access (Prostar, ABBOTT)

2. Lunderquistwire (extra stiff wire, COOK) to ascending aorta from right side, Angiocatheter from left side

3. Deployment of low profile TEVAR and 5-branched graft (CMD, COOK), 5th branch retrograde orientation

4. Transfemoral retrograde access to antegrade branches with steerable sheeth (Fustar sheeth 10F/70cm, LaMed) and placement of bridging stents (Viabahn/VBX, GORE; Advanta V12, GETINGE; VisiPro stent, MEDTRONIC; Fluency, BD)

5. Catheterisation and stenting of retrograde branch into false lumen with fenestration of the dissection membrane using Basilika-Technique

6. Potentially staged procedure, completion angiogramm according to approach

Live case transmission centers

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