



VASCUPEDIA

Postradiogenic occlusion of the infrarenal aorta and the iliac arteries

step by step case presentation and decision making

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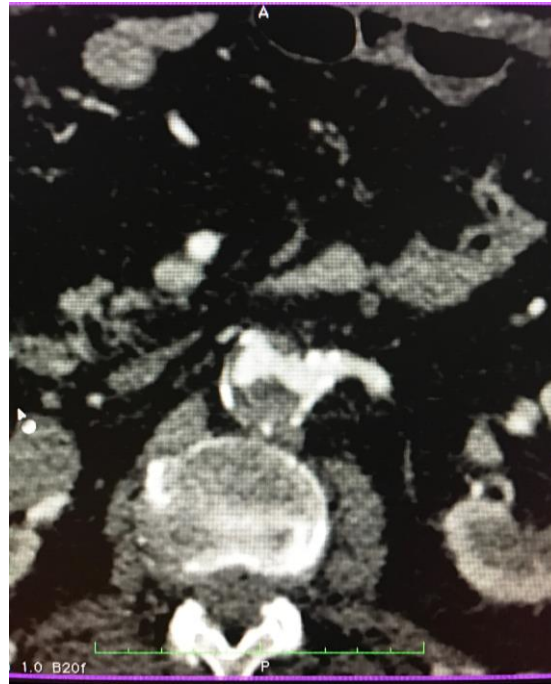
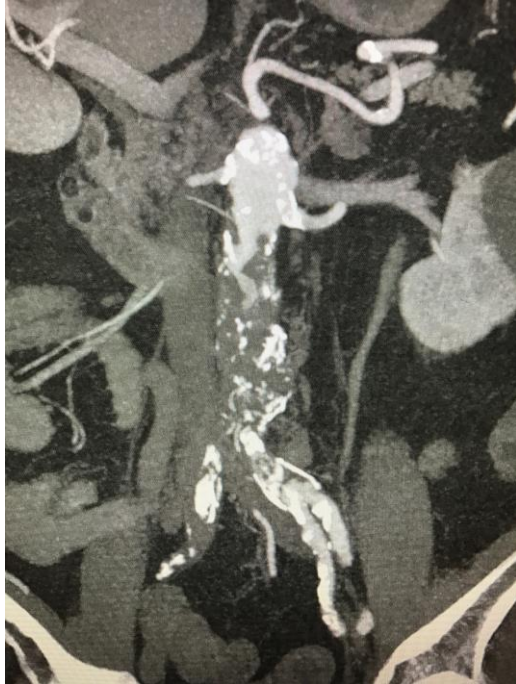
Case presentation

- Male
- 70 yrs old
- Comorbidity: Obesity, hypercholesterolemia, arterial hypertension, hostile abdomen, persistent urostoma
- Previous operations/interventions: Urostomy after neobladder-operation due to a urothelial cancer, radiotherapy of the abdomen and pelvic region
- Critical limb-threatening ischemia of both legs

Case presentation

- Symptoms: Ischemic rest pain of both legs (Rutherford 4), ABI 0.2/0.3
- Hostile abdomen after multiple trans-peritoneal operations and radiation
- Obesity (BMI 29; grade II)

CT-Angiogram



Preoperatively:

Thrombotic occlusion of the infrarenal aorta, starting right under the LRA due to a calcified occlusion of the iliac arteries.

What would be your treatment?

Transfemoral thrombectomy ?

Hybrid revascularization ?

Percutaneous approach ?

Axillo-femoral bypass ?

Transperitoneal re-do operation ?



Our concept and materials

We decided to perform a hybrid revascularization with an aorto-left-iliac reconstruction in chimney-technique for the LRA, kissing-stent-PTA for the left iliac bifurcation plus femoro-femoral x-over-bypass

Materials:

- Endurant II Limb (ETLW1616C82E; Medtronic)
- Endurant II Limb (ETLW1610C82E; Medtronic)
- 16x40 mm Atlas-Gold-Dilatation-Catheter (Bard)
- 6x38 mm Atrium Advanta V12 stent-graft (Maquet)
- 9x38 mm Atrium Advanta V12 stent-graft (Maquet)
- 8x38 mm Dynamic-Stent (Biotronik)
- 7x38 mm Dynamic-Stent (Biotronik)
- Lunderquist extra stiff wire, 0.035 (Cook Medical)
- 8mm Fusion Vascular Graft (Maquet)

Procedure

Step by step

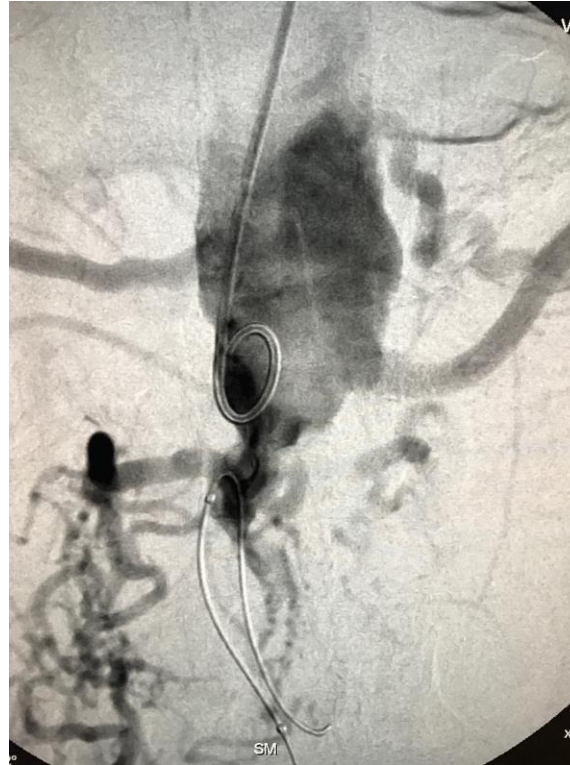
First step:

- Open access to both CFAs
- Recanalization of the infrarenal aorta and the left common iliac artery + predilatation
- Percutaneous transcubital placement of a 7F sheath in the LRA
- Implantation of two Endurant-limbs in the infrarenal aorta and the left CIA with a chimney for the LRA (6x38 mm Advanta V12)

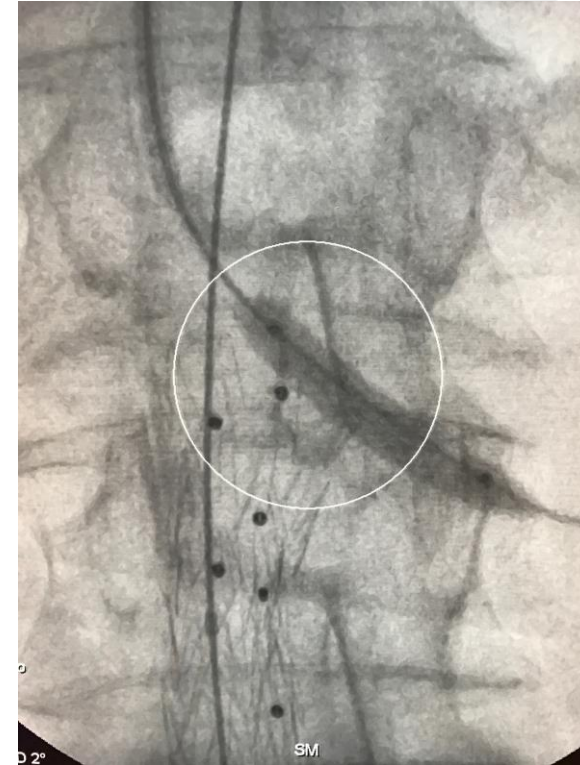
First step



a) Transfemoral approach from the left side



b) Recanalization of the infrarenal aorta and the left CIA



c) Predilatation and placement of two Endurant-limbs in the infrarenal aorta in chimney-technique for the LRA

Procedure

Step by step

Second step:

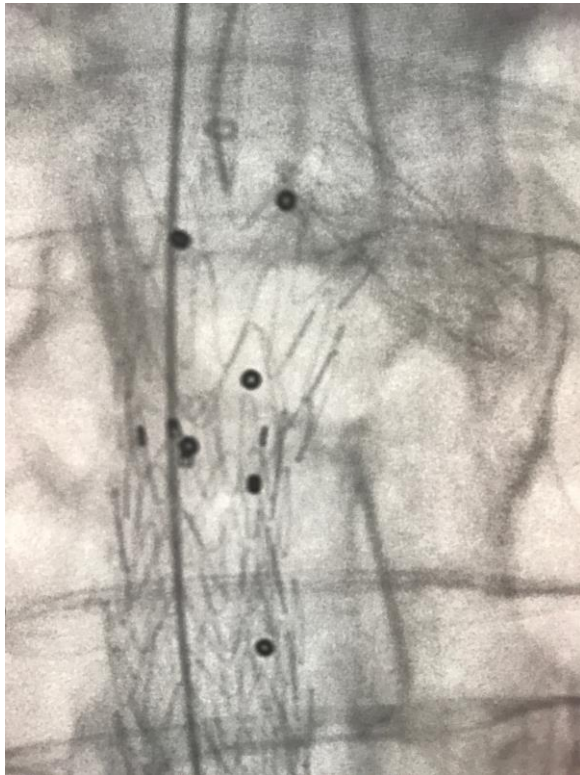
- Stent-graft implantation (9x38 mm Advanta) for the left common iliac
- Kissing-stent-PTA of the left iliac bifurcation (7x38 + 8x38 mm Dynamic)
- femoro-femoral x-over bypass with a 8 mm Fusion graft

Second step



Reconstruction the left iliac arteries. 9x38 Advanta for the left CIA + Kissing-stent-PTA of the left iliac bifurcation with a 7x38 Dynamic-stent for the IIA and a 8x38 Dynamic-stent for the EIA

Final result



Final clinical outcome

- Complete remission of the symptoms after the procedure
- Popliteal pulses bilateral palpable
- ABI 0.8/0.8 on the left side; 0.9/0.8 on the right side
- No procedure-related complications



Questions to Vascupedians

- Would you have done sth else?
- Do you treat postradiogenic vascular diseases open surgically?
- Which is your treatment strategy for a aorto-iliac occlusions ?