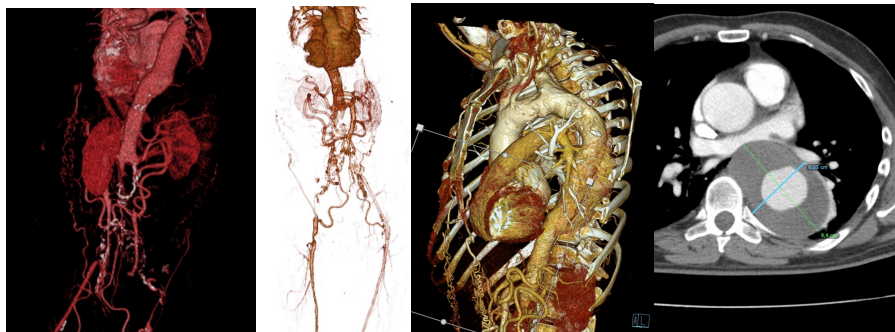


Introduction:

For TAAA endovascular therapy became first choice. For arterial occlusive disease we have different revascularization techniques and coronary 3 vessel disease is treated mostly with CABG. But if all of this comes together you can expect multiple problems.

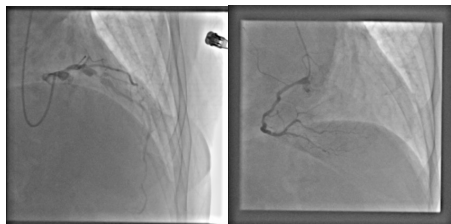
Patient Data: 55 year old male

Symptomatic with intermittend claudication, walking distance between 100 and 200 meters
Classification Fontaine Stage IIb, Rutherford Grade I Category 2
Risk Factors:
Nicotine
Arterial Hypertension, high cholesterol
Mitral Valve and Aortic Valve Regurgitation grade 1
Reduced LV function NYHA II

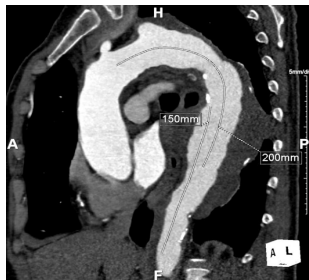


CT scan shows complete occlusion of the infrarenal aorta and iliacs. The thoracic aorta shows a thoracic aneurysm with indication for surgery. Stenosis of the celiac trunc.

Preoperative coronary catheterisation showed 3 vessel disease with preserved lv function
- Additional CABG



- 1st step:** Angioplasty and covered stent for the celiac trunc (landmark for TEVAR)
- 2nd step:** CABG with saphenous vein grafts (internal thoracic arteries serve as collaterals) and TEVAR with chimney for the LSA via the ascending aorta, 2 Gore CTAG and Gore Viabahn as Chimney
- 3rd step:** Peripheral revascularisation after recovery



TEVAR planned with sufficient overlap and chimney for the LSA under fluoroscopic guidance, distal landmark is the CT stent

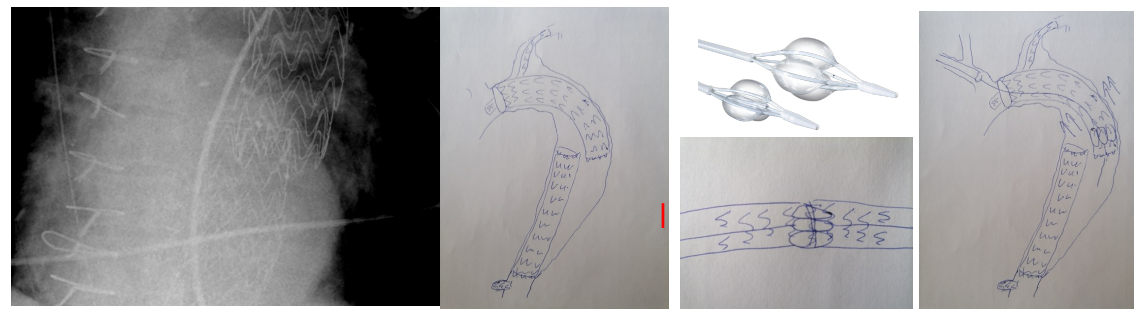


Via left brachial access angioplasty and implantation of VBX covered stent in the celiac trunc with good result

CABG with saphenous vein graft from both legs via median sternotomy, off pump technique
TEVAR and chimney for the LSA, introducer sheath via the ascending aorta for CTAG and left subclavian cutdown for Viabahn

Intraop Complications: After deployment of TEVAR right heart failure, CPR, immediate canulation and establishing of extracorporeal circulation. Additional vein graft to the RCA. When clamping for the aortal anastomosis local dissection at the ascending aorta, repair with polyester graft. After reperfusion weaning of CPB and stabilisation of the patient.

Early postop course without problems, weaning from ventilator next morning and extubation next day. But postoperative routine X-ray showed dislocation of the 2 Stent Grafts (Type 3 Endoleak)



Cutdown of right subclavian artery for 22 french dryseal sheath. Over the sheath with a trilobe balloon retraction of the distal end of the proximal stent graft. Parallel introduction of a steerable sheath and advancing a stiff wire in the distal stent graft. With the trilobe balloon over the stiff wire bringing the stent grafts in line. Interposition of additional Graft



Peripheral Complications: The right lower leg developed superficial necrosis, peripheral perfusion unchanged to preoperative. But indication for revascularisation to improve perfusion. Axillo-bi-femoral bypass with PTFE graft from the right subclavian artery to both common femoral arteries
Necrectomy of the right lower leg and negative wound pressure therapy was installed. With necrotising fasciitis destruction of muscular tissue with final amputation of lower leg necessary.
Final Result: Coronary grafts patent, TAAA excluded, peripheral revascularisation open, good healing at amputation site. Patient in Rehab now and learns to walk with leg prosthesis.