Bilateral endovascular interventions after crossover bypass grafting

Keep challenging cases simple!

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In patients with symptomatic unilateral iliac artery occlusion, ilio- or femoro-femoral crossover-bypass grafting may be a favourable alternative to aorto-femoral bypass grafting. However, following interventions might be difficult if the atherosclerotic disease proceeds and the patient develops a multilevel atherosclerotic disease.

A 62 year old patient was treated 5 years ago with femoro-femoral bypass due to occlusion of the right iliac artery (Fig 1).

Figure 1: Initial angio 5 yrs ago showing right iliac occlusion which was treated with a femoro-femoral crossover bypass (Gore-Tex).

Now, he presented with critical ischemia due to bilateral multivessel disease with high grade stenosis of the left iliac donor artery and at the contralateral right sight with high grade stenosis of the superficial femoral and popliteal artery as well as infrainguinal occlusions (Fig 2).

Fig. 2: transbrachial DSA after 5 yrs: complex multivessel disease.

Interventions step by step

before

after PTA

retrograde puncture of femoral artery distal to the bypass.

Stenting of the donor vessel, left iliac artery.

In conclusion, an interventional approach seems still to be a favourable therapeutic approach even after crossover bypass grafting. Challenging cases are simple, if you keep them simple.

Figure: infrainguinal revascularization: left before, right after PTA. Total intervention time 41min. Closure of puncture side by Compresar® (assisted manual compression).