**Introduction**

Anastomotic pseudoaneurysms are rare but challenging complications after aortoiliac reconstructive surgery. Possible etiologic mechanisms include graft infection, fatigue of the prosthesis or the suture material and degeneration of the host artery due to atherosclerosis.

**Case**

A 67 years old male patient was referred to our clinic with bilateral groin swelling and pain complains. He had had an femoro-popliteal bypass surgery using an autologous saphenous vein as a graft conduit in 2012. Two years later, an aorto-bifemoral artery bypass surgery with a HEMAGARD KNITTED BIFURCATED prosthetic vascular graft was performed due to severe aorto- iliac occlusive disease (Leriche Syndrome) causing critical limb ischemia. On admission there were 2 pulsating masses in the both groins noticed (figure 1).

Arterial phase contrasted tomography showed the aortic bifemoral prosthetic graft patent and a right and left pseudoaneurysm structures with a diameter measured as 6 cm and 5 cm respectively. The right pseudoaneurysm was formed in the para-anastomotic region between the previously implanted autologous saphenous vein graft and the prosthetic graft. The left one instead originated from the para-anastomotic region between the graft prostheses and the common femoral artery (figure 2a).

Both the superficial femoral arteries were occluded and a wealthy collateral network was supplied from the deep femoral arteries. Infra-popliteal circulation showed profound atherosclerosis with no occlusive disease. There was no infection signs of the graft. Immunologic analyses were negative indicating no vasculitis.

Interestingly simultaneously performed peripheral angiography showed that the perfusion of the right deep femoral artery was supplied retrogradely via the anastomosed prosthetic and vein graft so that this anatomic feature enabled us to implant a graft stent due to possible occlusion of the retrograde flow perfusing the deep femoral artery( Figure 2b).

As a result, patient was transferred to the cardiac surgery and a successful bilateral para-anastomotic pseudoaneurysm excision and graft implantation was contemplated (Figure 4).