2010　Perivascular Inflammatory Reaction to a VIABAHN PTFE Stent-Graft Which Could be Diagnosed by MRI and Successfully Treated by Steroid Drug.

A 76-years old man with right leg claudication was revealed right superficial femoral artery (SFA) occlusion by contrast CT. Endovascular treatment (EVT) was performed to right SFA. Wire passed through sub-intima at the part of proximal, and could get a true lumen except the proximal site. 5A *250mm of PTFE stent-graft, VIABAHNTM, was deployed.

Five days after EVT, he developed a fever, pain, and local swelling of the right femoral region. Venous thrombosis was excluded by ultrasound imaging; a normal flow profile was observed in the right common and superficial femoral arteries. Blood analysis revealed an elevation of serum inflammatory markers. Although PTFE stent-graft was patent, MRI revealed extensive soft-tissue edema and perivascular T2 high signal around the right SFA stent-graft implanted area. We diagnosed perivascular inflammatory reaction of PTFE stent-graft and initiated steroid therapy. Within 7 days after initiation of steroid therapy, the clinical symptoms were gradually resolved and we could decrease steroid drug gradually and completely stop for 3 weeks. Follow-up MRI scans demonstrated significantly reduced such inflammatory reactions over the next few months. Symptomatic perivascular inflammatory soft-tissue response around a PTFE stent-graft can be diagnosed with MR imaging studies and improved by steroid drug. We would like to demonstrate these cases with some consideration.