Successful Treatment of Lymphedema in a Vasculopath and Neuropathic Patient
Suzanne Inchauste, M.D., Justin Zelones, M.D., Danielle Rochlin, M.D., Dung H Nguyen, M.D.
Stanford University

Abstract: A 68 year-old male with chronic acquired stage III right lower extremity lymphedema s/p right inguinal lymph node dissection and adjuvant chemoradiotherapy in 1961 for treatment of Hodgkin’s lymphoma. His history was complicated by radiation-induced right femoral artery thrombosis s/p revascularization with saphenous vein graft over 20 years ago and recent angioplasty of popliteal artery with stent placement on 4/12/17. He also had an excision of a right thigh schwannoma of the sciatic nerve on 5/19/17 that resulted in foot drop and neuropathy that is exacerbated by his lymphedema. The patient has optimized complex decongestive physiotherapy without improvement of symptoms. He was initially treated with partial debulking of the fibrofatty tissue in his right leg with liposuction. He then underwent three VLNTs placed in tandem from the groin to the posterior calf and then at the ankle, to improve lymphatic drainage along the length of his leg. Dissection was challenging due to significant radiation fibrosis and skin thickening from tissue fibrofatty deposits. The saphenous vein graft was carefully preserved to avoid devascularizing the leg. Nanofibrillar collagen scaffolds were used to bridge the VLNTs and to cross over the contralateral normal groin lymph node basin. At 3 months post-op, he had significant volume reduction of his leg and nearly normalized his measurements compared to the normal left leg. His ankle range of motion and neuropathy were also much improved.