COMPLICATIONS: None.

BLOOD LOSS: None.

PATHOLOGY: None.

INDICATIONS: This is a 52-year-old female with idiopathic neuropathy and overlying compression neuropathies. She has met the criteria for the independent nerve compressions listed above. We had lengthy discussions regarding the anatomy, risks and benefits, procedure, spectrum of outcomes and postoperative course and the patient has been consented for surgery.

OPERATIVE PROCEDURE: The patient was brought into the operating room and laid on the table in the supine position. After induction of general anesthesia, a left upper thigh tourniquet was placed. The left leg was then prepped and draped in a sterile fashion. Following timeout, Esmarch exsanguination was performed and the tourniquet insufflated to 300mmHg.

Starting with the lower extremity in frog leg position, an incision was made over the upper medial calf. Dissection was carried down through skin and subcutaneous tissue. The saphenous vein and saphenous nerve were identified and retracted, protecting them throughout the case. We decompressed the posterior leg compartment muscular fascia. Dissection medial to the medial gastroc was performed. The plane between this and the soleus was developed. Palpation with the index finger was done to localize the level of the soleus sling under the fat pad in the posterior knee area. The fat pad was swept laterally exposing the soleus muscle. Starting on the medial edge of the soleus muscle and distal to the soleus sling, the muscle fibers were elevated off the underlying deep compartment fascia using bipolar cautery. This fascia was then entered distally and decompressed in retrograde fashion until the dense fascial band making up the soleus sling was fully divided. Dissection was then carried distally fully decompressing the deep compartment, which was very tight and compressing the nerve. We then dissected proximally to above the knee crease, decompressing some perineural fibrosis and fascial bands on the tibial nerve in the posterior knee area. The area was then irrigated and 0.25% Marcaine was injected into the subcutaneous tissue. The wounds were closed in a layered fashion using 5-0 PDS and Dermabond for skin.

The leg was then re-positioned with the knee flexed, exposing the dorsum of the foot. An incision was made over the confluence of the extensor hallucis brevis tendon and the deep peroneal nerve. Dissection was carried down through skin and subcutaneous tissue.