

When assessing a patient with numb/tingly or painful feet and legs please consider and assess the following before ordering a nerve conduction study (NCS) or EMG:

Physical examination:

- Are the reflexes DIMINISHED?
- Is there decreased light touch/pin prick/temperature in a stocking and glove distribution? This suggests a possible peripheral neuropathy (see bloodwork below).
- If the sensory changes are in the distribution of a nerve root, consider a radiculopathy (requires MRI spine)
- If the sensory changes are in the distribution of a spinal level, consider a spinal cord lesion (requires MRI spine)
- BRISK reflexes +/- upgoing toes (Babinsky) also suggest a spinal cord lesion (consider MRI spine)

You may wish to order the workup up for causes of peripheral neuropathy, including but not limited to: HgA1C, ENA, ANA, RF, ESR, CRP, HIV serology, copper levels, B12, folate, TSH, T4, AM cortisol, Vitamin E levels, SPEP, UPEP, VDRL, CK, Lyme serology, Magnesium, calcium. You could also consider paraneoplastic antibodies if the remainder come back negative.

IF:

1. There is indeed evidence of peripheral neuropathy on examination
2. No clear treatable cause is identified or
3. Symptoms are progressing over < 3-6 months

Then consider a referral for EMG/NCS