

Sensory Studies and their utility in Electrodiagnostic Medicine

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1.If sensory amplitudes are normal with loss of motor amplitudes D/D should include

Preganglionic lesions (proximal to dorsal root ganglion)

Root lesions (loss of sensation: previous back or neck surgery, root avulsion)

C6: Median thumb, Radial 1st web space, LABC

C7: Median 3rd digit

C8: Ulnar 5th digit, MABC

L4: Saphenous

L5: Superficial Fibular

S1: Sural

AHC pathology (No loss of sensation: polio, ALS)

Long standing UMN lesions with severe disuse atrophy (Sensory loss +/- syringomyelia, SCI, CVA)

Postjunctional lesions (at or distal to neuromuscular junction: No loss of sensation)

NMJ pathology (LEMS, MG)

Myopathy

Nerve lesions (No loss of sensation)

Pure motor neuropathies

2. If sensory amplitude is abnormal with normal motor amplitude

Ganglion or postganglionic lesion

Neuronopathy affecting dorsal root ganglion

Pure sensory neuropathy

3. Sensory latencies are useful in focal entrapment neuropathies or demyelinating sensory motor PPN

4. If doing unusual sensory nerves always compare to the opposite side.