

SIGNS	PATHWAY EFFECTED	+ RESULTS	ABNORMAL BASELINES
Lhermitte's Sign: Assesses SC lesions	posterior columns	electrical shocks down arms when pt bends head back or forward	SSEP
Babinski Sign	upper motor neuron damage corticospinal tract in the CNS	positive when big toe dorsiflexes and other toes fan	TCeMEP DWave and CMAP
Hoffman's Sign	reflex test verifies problems in the corticospinal tract upper motor neuron dysfunction	tapping fingernail or flicking the terminal phalanx of the third or fourth finger positive if flexion of the terminal phalanx of the thumb	TCeMEP DWave and CMAP

SYNDROMES/TESTS	PATHWAY EFFECTED	ABOUT	ABNORMAL BASELINES
Brown Sequard Syndrome	ipsilateral loss of motor function, contralateral loss of sensory function, below level of injury	lateral penetrating hemi-section of the spinal cord	Ipsi TCEMEP Contra SSEP: below injury level
Romberg Test	posterior columns	tests proprioception pt stands with eyes closed and one firmly pushes on the back and then on the chest; poor postural reflexes result in propulsion, retropulsion, commonly lost with Parkinson's	SSEP
Multiple Sclerosis	Central Nervous System	MS destroys oligodendrocytes: cells responsible for creating myelin in the CNS de-myelination	SSEP: Normal peripheral responses other responses delayed
Myasthenia Gravis	motor pathways	autoimmune disease: neuromuscular junction malfunctions resulting in episodes of muscle weakness no neuro-transmittance	TCEMEP
Marie Charcot	motor and sensory neuropathy affects Peripheral Nervous System	inherited neurological disorders usually presents in LE first	SSEP TCEMEP
Peripheral Neuropathy d/t Diabetes Peripheral Artery Disease/ arteriosclerosis	Peripheral Nervous System	first nerve fibers to malfunction are the ones that travel the furthest from the brain and the spinal cord	SSEP
Parkinsons	Central Nervous System	degenerative disorder impairs <u>motor skills</u> and speechmotor system ... chronic, and progressive loss of dopamine causes the nerve cells to fire out of control causing symptoms above	SSEP TCEMEP
Gillian Barre	Peripheral Nervous System	polyneuritis/ <i>progressive</i> muscular weakness/extremities body's immune system attacks part of the peripheral nervous system; usually increases in intensity until paralyzed; one person in 100,000 most patients recover	SSEP TCEMEP