

ADVANCED NEUROLOGICAL EVALUATION & TREATMENT CENTER
PSL/St Luke's Medical Center, Professional Plaza East
1601 East 19th Avenue, Suite 4400
Denver, CO 80128
Phone (303)863-0501 Fax (303)863-0497

Test Date: 3/9/2022

Patient Name:	Kyle Fowler	DOB:	7/12/1995	Physician:	Alexander Feldman, MD
Height:	" "	Sex:	Male	Referring Physician:	

HISTORY:

Patient is a 26 year old male who was referred to rule out a neuropathy and/or myopathy. Patient presents with complaints of chronic lower back discomfort, weakness and tingling in the bilateral lower extremities. Symptoms have been present for last 2 years.

NCV Findings:

Motor nerve conduction studies revealed normal distal latencies, amplitude and conduction velocities of bilateral tibial and peroneal nerves. Sensory nerve conduction studies revealed normal peak latencies and amplitudes for bilateral sural and superficial peroneal nerves. No significant side-to-side difference was noted.

EMG Findings:

Monopolar needle EMG was performed in selected bilateral lower extremity muscles innervated by L2-S1 nerve roots inclusive. No spontaneous activity was seen in any muscles tested in the form of fibrillations, positive sharp waves, or fasciculations. Volitional activity revealed chronic denervating findings in the Right Tibialis anterior muscle and bilateral Peroneus Longus muscles.

IMPRESSION:

The above electrodiagnostic study reveals evidence of:

- 1) Bilateral L-5 chronic radiculopathy R>L, as shown by:
 - Chronic denervating changes in the Right Tibialis anterior muscle and bilateral Peroneus longus muscles.

The above electrodiagnostic study reveals no evidence of: Peroneal neuropathy, Peripheral neuropathy.

Note that conventional EMG and nerve conduction studies do not test small sensory nerves fibers which, when relatively irritated, may underlie pain and paresthesias arising from within "named" peripheral nerves, soft tissues and bony structures, and sensory roots.

Clinical correlations are advised.

Thank you for the courtesy of this referral.

Signed Electronically:

Alexander Feldman, MD

Nerve Conduction Studies

Anti Sensory Summary Table

Site	NR	Peak (ms)	Norm Peak (ms)	O-P Amp (µV)	Norm O-P Amp	Site1	Site2	Dist (cm)	Vel (m/s)
Right Sup Peron Anti Sensory (Ant Lat Mall)									
14 cm		2.8	<4.6	25.2	>5.0	14 cm	Ant Lat Mall	12.0	43
Right Sural Anti Sensory (Lat Mall)									
Calf 14cm		3.7	<4	19.7	>5	Calf 14cm	Lat Mall	14.0	38
Left Sup Peron Anti Sensory (Ant Lat Mall)									
14 cm		3.2	<4.6	17.9	>5.0	14 cm	Ant Lat Mall	12.0	38
Left Sural Anti Sensory (Lat Mall)									
Calf 14cm		3.0	<4	16.1	>5	Calf 14cm	Lat Mall	14.0	47

Ortho Sensory Summary Table

Site	NR	Peak (ms)	O-P Amp (µV)	Site1	Site2	Dist (cm)
Right Medial/Lateral Plantar Ortho Sensory (Med Malleolus)						
Med 14 cm		3.7	9.8	Med 14 cm	Med Malleolus	0.0
Lat 14 cm		3.7	6.5	Lat 14 cm	Med Malleolus	0.0
Left Medial/Lateral Plantar Ortho Sensory (Med Malleolus)						
Med 14 cm		3.4	49.0	Med 14 cm	Med Malleolus	0.0
Lat 14 cm		3.5	7.0	Lat 14 cm	Med Malleolus	0.0

Motor Summary Table

Site	NR	Onset (ms)	Norm Onset (ms)	O-P Amp (mV)	Norm O-P Amp	Site1	Site2	Dist (cm)	Vel (m/s)	Norm Vel (m/s)
Right Peroneal Motor (Ext Dig Brev)										
Ankle		3.6	<5.5	4.2	>1.5	B Fib	Ankle	34.0	49	>40
B Fib		10.5		3.6		Poplt	B Fib	10.0	50	>40
Poplt		12.5		4.0						
Right Peroneal TA Motor (Tib Ant)										
Fib Head		2.0		4.7						
Right Tibial Motor (Abd Hall Brev)										
Ankle		4.4	<5.6	22.6	>2.0	Knee	Ankle	39.0	44	>39
Knee		13.2		19.3						
Left Peroneal Motor (Ext Dig Brev)										
Ankle		3.8	<5.5	4.7	>1.5	B Fib	Ankle	34.0	52	>40
B Fib		10.3		4.4		Poplt	B Fib	10.0	59	>40
Poplt		12.0		4.4						
Left Peroneal TA Motor (Tib Ant)										
Fib Head		2.4		5.7						
Left Tibial Motor (Abd Hall Brev)										
Ankle		5.0	<5.6	24.0	>2.0	Knee	Ankle	39.0	46	>39
Knee		13.4		21.2						

EMG

Side	Muscle	Nerve	Root	Ins Act	Fibs	Fascic	Psw	Amp	Dur	Poly	Recrt	Int Pat	Effort
Right	VastusMed	Femoral	L2-4	Nml	Nml	Nml	Nml	Nml	Nml	0	Nml	Nml	Full
Right	AdductorLong	Obturator	L2-4	Nml	Nml	Nml	Nml	Nml	Nml	0	Nml	Nml	Full
Right	AntTibialis	Dp Br Peron	L4-5	Nml	Nml	Nml	Nml	SI-Incr	Nml	Few	Rapid	75%	Full
Right	Peroneus Long	Sup Br Peron	L5-S1	Nml	Nml	Nml	Nml	SI-Incr	Nml	0	Nml	50%	Full
Right	Gastroc	Tibial	S1-2	Nml	Nml	Nml	Nml	Nml	Nml	0	Nml	Nml	Full
Left	VastusMed	Femoral	L2-4	Nml	Nml	Nml	Nml	Nml	Nml	0	Nml	Nml	Full
Left	AdductorLong	Obturator	L2-4	Nml	Nml	Nml	Nml	Nml	Nml	0	Nml	Nml	Full
Left	AntTibialis	Dp Br Peron	L4-5	Nml	Nml	Nml	Nml	Nml	Nml	0	Nml	Nml	Full
Left	Peroneus Long	Sup Br Peron	L5-S1	Nml	Nml	Nml	Nml	Gr-Incr	Nml	Few	Rapid	25%	Full
Left	Gastroc	Tibial	S1-2	Nml	Nml	Nml	Nml	Nml	Nml	0	Nml	Nml	Full

Waveforms:



