

Blocked but Not Forgotten - The Enigma of Post-Nerve Block Pain: A Case Report

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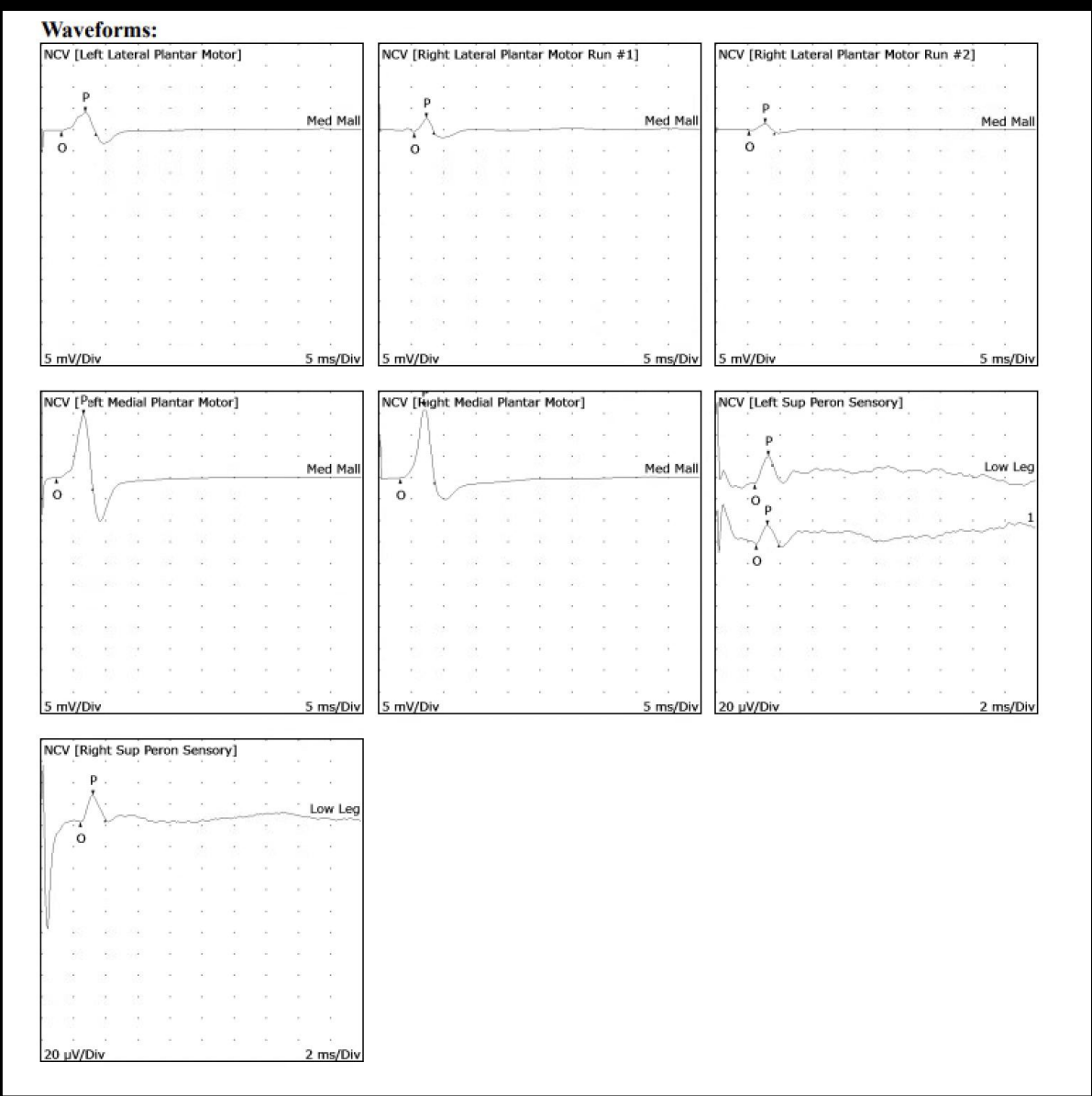
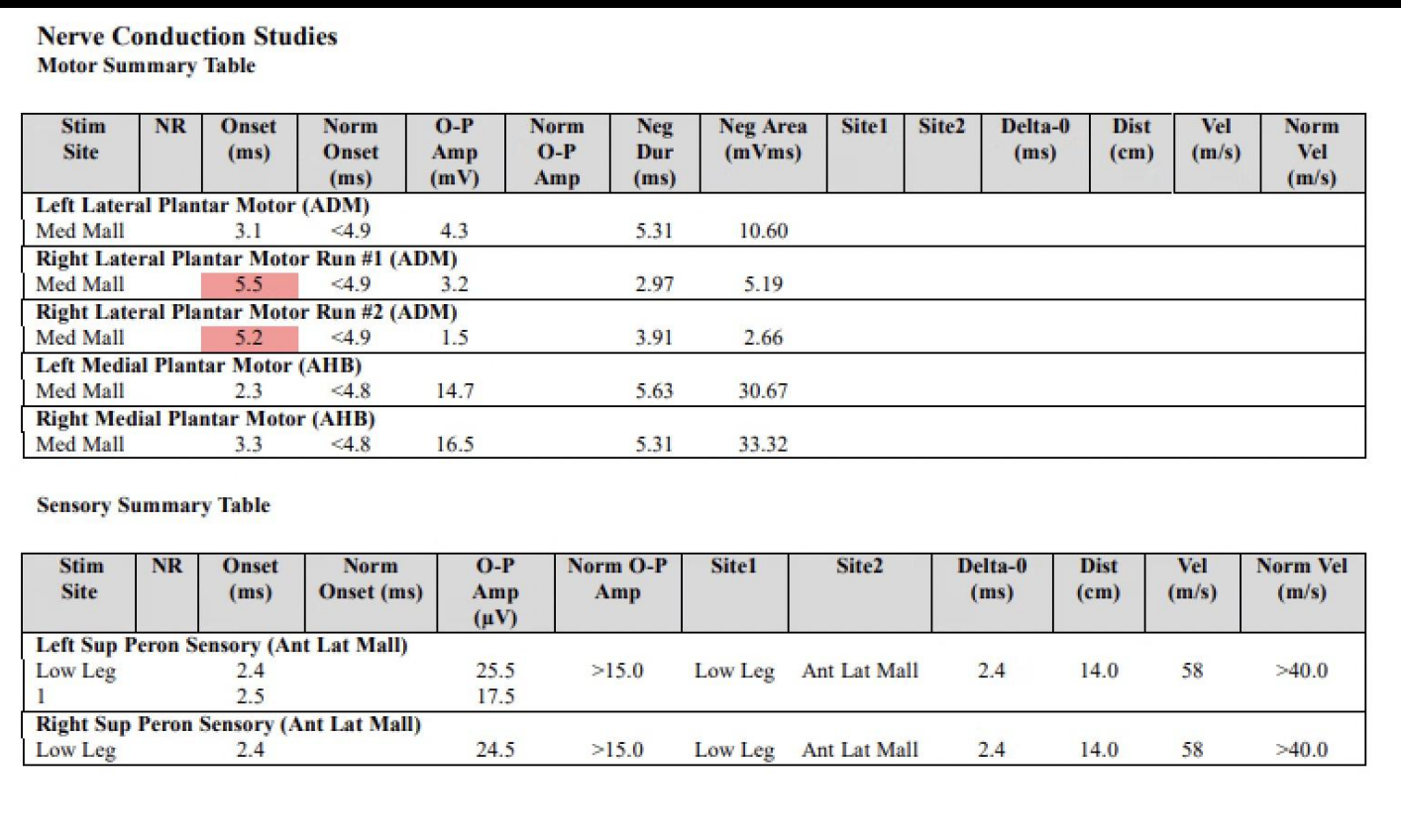
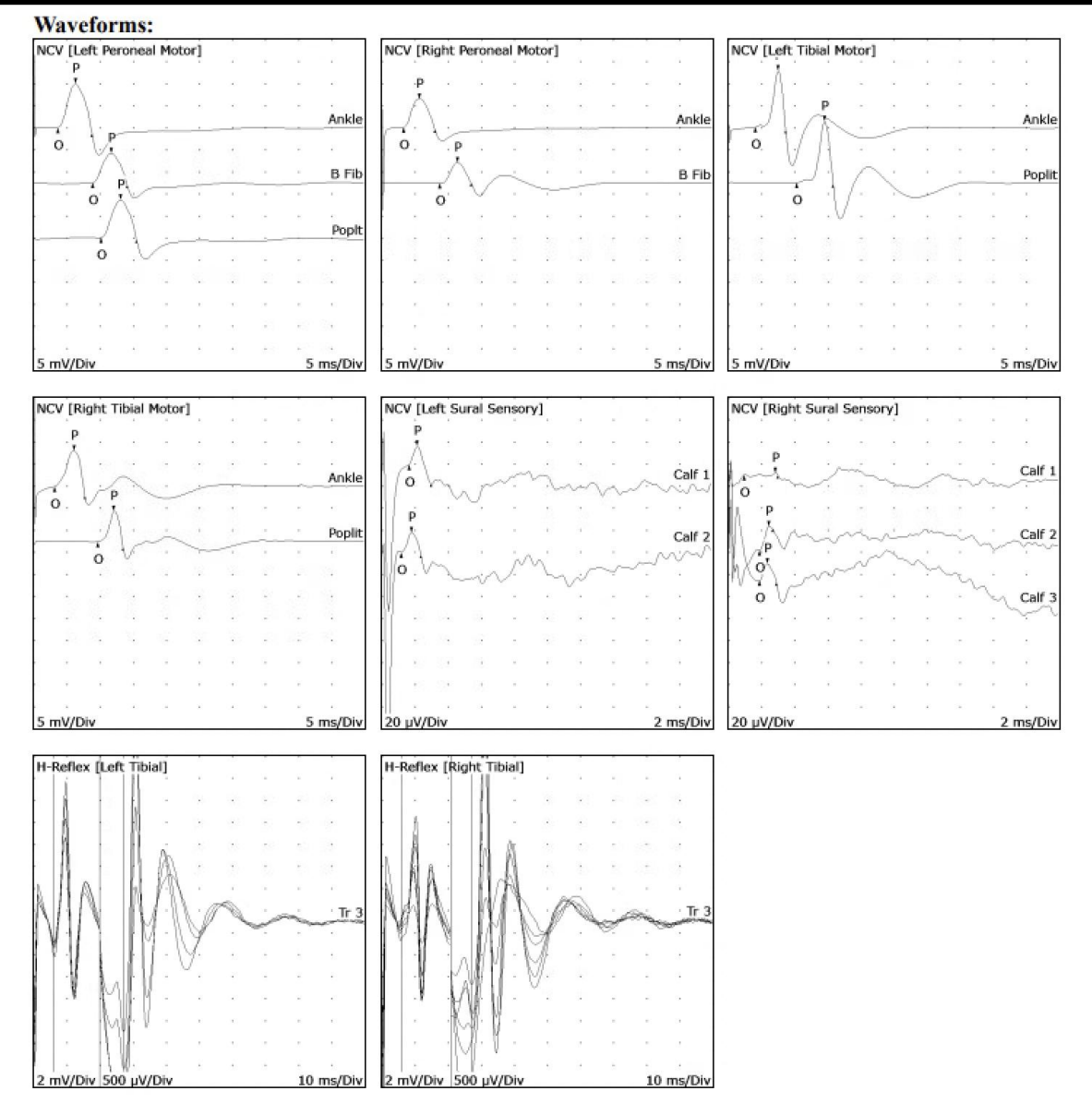
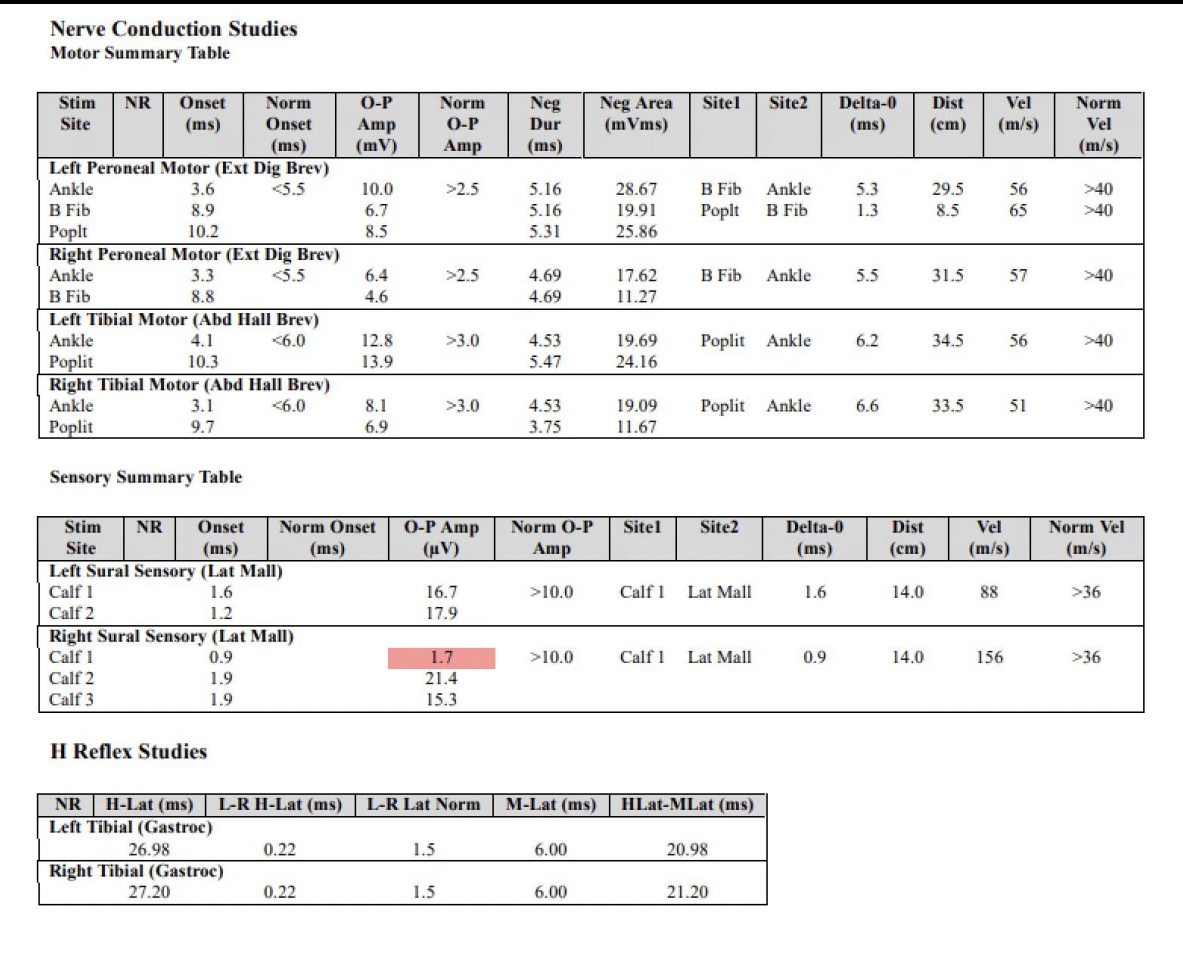
Introduction

32-year-old female presented to the Physical Medicine & Rehabilitation clinic with pain in the left medial foot and anterior tibial area, which she attributes to a nerve block received during plantar fasciitis surgery. She experienced immediate pain during a tibial nerve block, which continued throughout the procedure and has since resulted in constant paresthesias described as burning and gnawing, worsening at night. During her visit, she reported no muscle weakness or tightness, and no functional deficits were found, with strength and sensation intact in both lower extremities. Peripheral nerve injury (PNI) was suspected, but initial physical exam findings were normal.

Materials and Methods

As the case report is devoid of patient identifiable information, it is exempt from IRB review requirements as per Nassau University Medical Center policy.

Figures



EMG

Side	Muscle	Nerve	Root	Ins Act	Fibs	Psw	Amp	Dur	Poly	Fascic	Recrt	Int Pat	Comment
Left	MedGastroc	Tibial	S1-2	Nml	0	0	Nml	Nml	Nml	0	Nml	Nml	
Left	AntTibialis	Dp Br Peron	L4-5	Nml	0	0	Nml	Nml	Nml	0	Nml	Nml	
Left	VastusMed	Femoral	L2-4	Nml	0	0	Nml	Nml	Nml	0	Nml	Nml	
Left	L5 Parasp	Rami	L5	Nml	0	0							
Left	S1 Parasp	Rami	S1	Nml	0	0							
Left	Peroneus Long	Sup Br Peron	L5-S1	Nml	0	0	Nml	Nml	Nml	0	Nml	Nml	

References



Results

Electromyographic (EMG) and nerve conduction studies (NCS) of the left lateral plantar motor, left medial plantar motor, and left superficial peroneal sensory nerves were within normal limits, and repeat studies a week later showed the same results. Despite this, the patient's pain persisted. In management of her pain, neurology prescribed gabapentin 300mg once a day at bedtime.

Discussion

This case highlights a patient with medial foot and leg pain post tibial nerve block. Prior studies have found immediate peripheral nerve block complications are uncommon and lasting complications are rare. The incidence of nerve damage after PNB is low, with difficulty in determining anesthesia vs surgical causes. Cases of PNI are often multifactorial, including complications such as vascular insufficiency, patient positioning, and other comorbidities. Due to the rare nature of these adverse events, few cases with this patient's complaints were available to review. Both EMG and (NCS) have been shown to aid in diagnosis and localization of PNI. While the EMG and NCS in this case showed no abnormalities, given the patient's presentation a neuropathic mechanism was still suspected and treated accordingly.