

## Sensory nerve conduction studies lower limb

### Sural nerve

**A:** posterior to lateral malleolus

**R:** placed 3-4 cm distally

**Stim:** posterior-lateral calf at a distance 14 cm

**Caution:** supramaximal stimulation can be achieved with low intensities (5-25 mA); to maximize response the recording electrodes may have to be repositioned either slightly medially or laterally to the original position

### Superficial peroneal nerve

**A:** between the tibialis anterior tendon and lateral malleolus

**R:** 3-4 cm distally

**Stim:** lateral calf at a distance 14 cm

**Caution:** supramaximal stimulation can be achieved with low intensities (5-25 mA); to maximize response the recording electrodes may have to be repositioned either slightly medially or laterally to the original position

### Saphenous nerve

**A:** between medial malleolus and tibialis anterior tendon

**R:** 3-4 cm distally

**Stim:** stimulator placed in the groove between tibia and medial gastrocnemius muscle

**Caution:** response often is small and may be difficult to obtain in normal controls, especially those older than age 40. Side-to-side comparison is necessary; may be abnormal in lesions of femoral nerve and lumbar plexus

*Normal adult values:*

Nerve	Record	Amplitude ( $\mu$ V)	Conduction velocity m/s	Distal peak latency (ms)	Distal distance (cm)
Sural	Posterior ankle	>6	>40	<4,4	14
Superficial peroneal	Lateral ankle	>6	>40	<4,4	14
Saphenous	Medial ankle	>4	>40	<4.4	14

*Electromyography and neuromuscular disorders Edition 2*

*Preston, Shapiro*

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