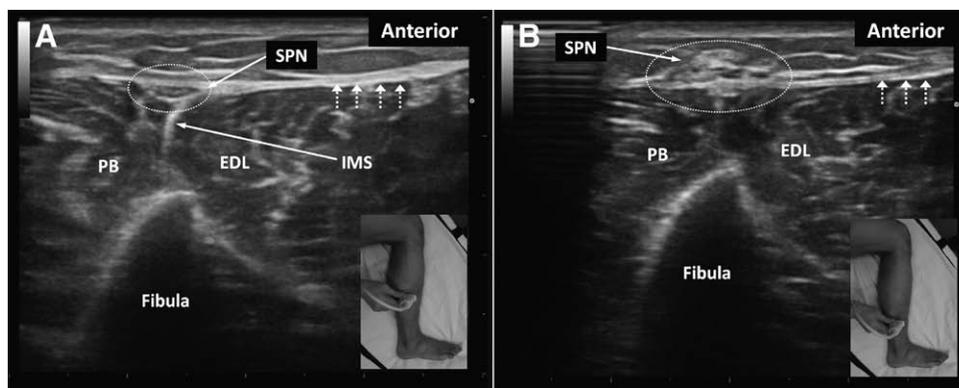


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## Ultrasound Visualization of the Superficial Peroneal Nerve in the Mid-calf

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**T**HE superficial peroneal nerve (SPN) arises from the common peroneal nerve at the level of the fibular neck and descends in the lateral compartment of the leg. In the distal half of the leg, the SPN is sandwiched between peroneus brevis and the intermuscular septum that separates the anterior and lateral compartments of the

leg, and gradually ascends into a superficial location before eventually piercing the crural fascia.<sup>1,2</sup> Here the SPN divides into medial and intermediate dorsal cutaneous nerves, which travel subcutaneously to supply the dorsum of the foot.<sup>3</sup>

The SPN is traditionally blocked by “blind” subcutaneous infiltration of local anesthetic across the dorsum of the foot at the intermalleolar line. The SPN may, however, be reliably located and blocked using ultrasound by placing a high-frequency (10–15 MHz) linear-array transducer transversely across the lateral aspect of the leg midway between the fibular head and lateral malleolus. The chief landmark is the fibula, which in cross-section casts an acoustic shadow with a peaked appearance. The “peak” of this shadow points toward the intermuscular septum (IMS) and the SPN. The nerve is visible as a hyper- or hypoechoic structure lying between peroneus brevis (PB) and extensor digitorum longus (EDL) just deep to the crural fascia (dotted arrows, fig. A). The identity of the SPN can be confirmed by tracing it distally toward the ankle, and observing the nerve rise through the crural fascia into a subcutaneous location (fig. B). The nerve may also widen, reflecting its bifurcation into its terminal branches.

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