

Nerve blocks in the leg

The common peroneal nerve winds around the head of the fibula before passing under the head of peroneus longus and branching into the superficial and deep branches. The superficial branch supplies the peroneal compartment in which it runs under peroneus longus in the upper half of the leg. At this level it may be identifiable as the large lateral branch of the common peroneal nerve after it crosses the fibula neck. It emerges to run superficially on peroneus brevis in the lower half of the leg.

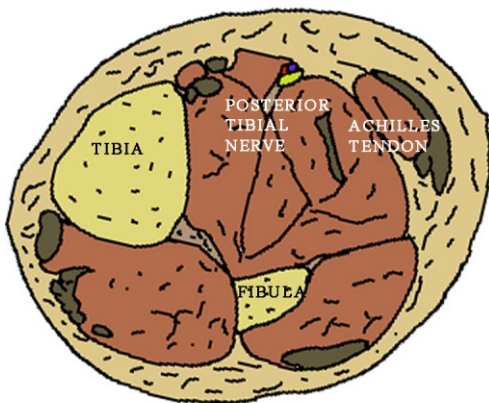


Fig 3.41 Diagram of leg above the ankle showing position of posterior tibial nerve

The deep branch supplies the anterior compartment of the leg where it lies accompanied by the anterior tibial artery with which it enters into the foot as the dorsalis pedis artery. The nerve may be blocked using the anterior tibial artery identified from the front of the leg to guide the injection

The tibial nerve leaves the popliteal fossa passing between popliteus and soleus and running with the tibial artery deep in the posterior leg. It emerges with the tibial artery above the medial side of the ankle between flexor hallucis longus, flexor digitorum longus and tibialis posterior. It is clearly identifiable at this level.

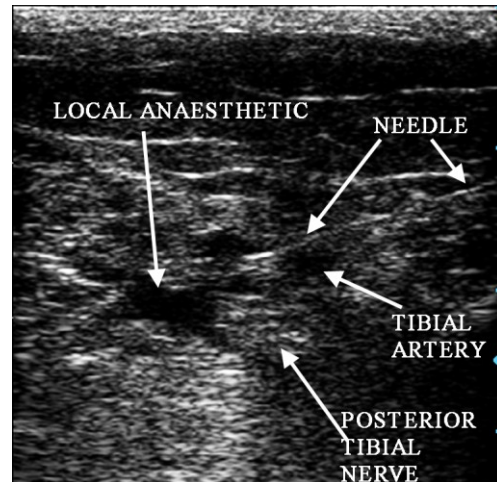


Fig 3.42 Posterior tibial nerve block above the medial ankle



Fig 3.43 Needle and hand position for perpendicular in plane approach to posterior tibial block

Using a 50 mm needle 5 to 7 ml of 0.75% to 1% ropivacaine is placed around the nerve which is identified in the neurovascular bundle with the posterior tibial artery.

The posterior tibial nerve is also identifiable in the sub talar canal however the approach is not as convenient as in the leg due to the bulk of the ultrasound probe.

Ultrasound Guided Procedures in Anaesthesia

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In describing this ultrasound guided procedure it has been assumed that attention has been paid to appropriate location, personnel, sterility, preparation, doses and technique necessary for the safe conduct of major nerve blocks and other procedures. These medical procedures should not be attempted without suitable qualifications

Acknowledgements

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