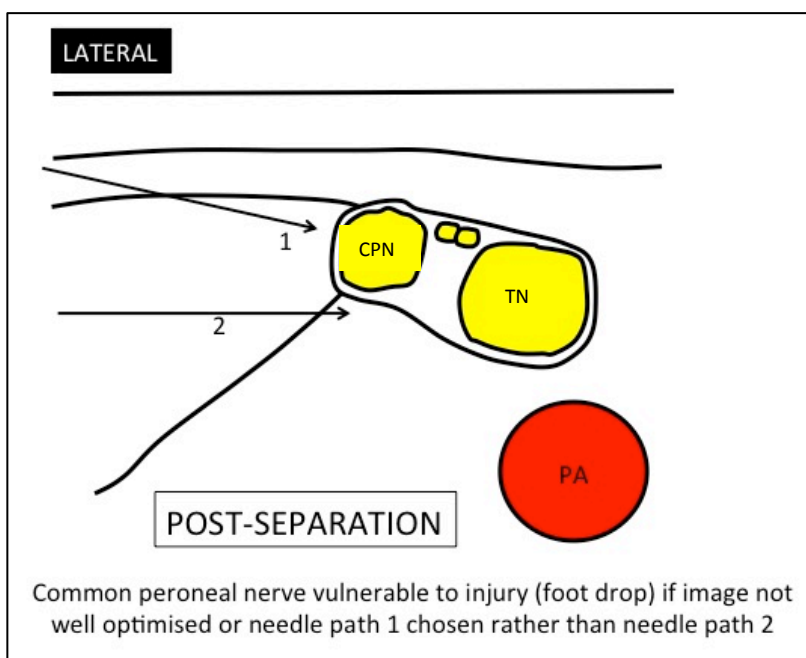
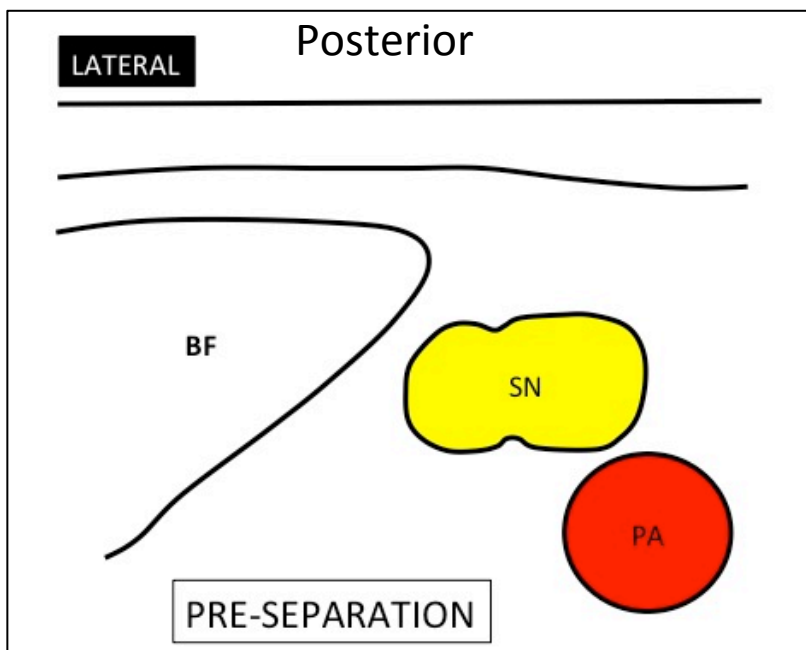


# POPLITEAL SCIATIC

*Toolbox:* online modules 7; RAP lecture 4; hands-on module 2

Identifying where the sciatic nerve (SN) separates into its common peroneal nerve (CPN) and tibial nerve (TN) components is important for **protection of the CPN** which may lie in the path of the needle trajectory. Both components lie within a common connective tissue layer referred to recently as the paraneural sheath. The sciatic nerve lies between the medial side of the biceps femoris (BF) and popliteal artery and it is posterolateral to the popliteal artery (PA). The popliteal vein (not drawn) lies close to the PA.



## KEY STRUCTURES TO IMAGE

- BICEPS FEMORIS
- POPLITEAL VESSELS
- COMMON PERONEAL NERVE (CPN)
- TIBIAL NERVE (TN)

## INDICATIONS

- Major foot surgery#
- Total knee arthroplasty (refer to TIPS section)
- Tibial surgery\*

*\*Avoid if acute tibial fracture (high risk of compartment syndrome)  
or valgus deformity total knee arthroplasty (risk of common peroneal injury)  
#Suggest adding saphenous nerve block for  
foot/ ankle surgery to cover medial leg to medial malleolus*

**CONTRAINDICATIONS** valgus deformity (if patient for total knee joint replacement, peripheral neuropathy)

## SUGGESTED LOCAL ANESTHETIC DOSAGES

- 10-30 mL 0.2-0.5 % ropivacaine (postop analgesia)
- 20-30 mL 0.75% ropivacaine (major ankle surgery, non-weight bearing patients), lignocaine 2% suitable for surgical anesthesia

## TRANSDUCER

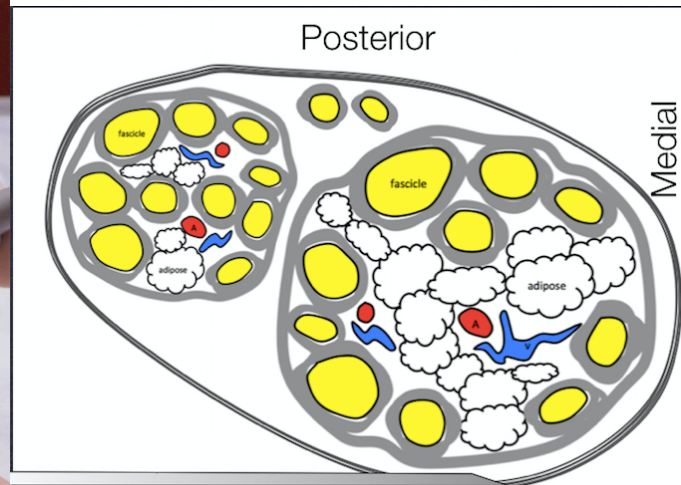
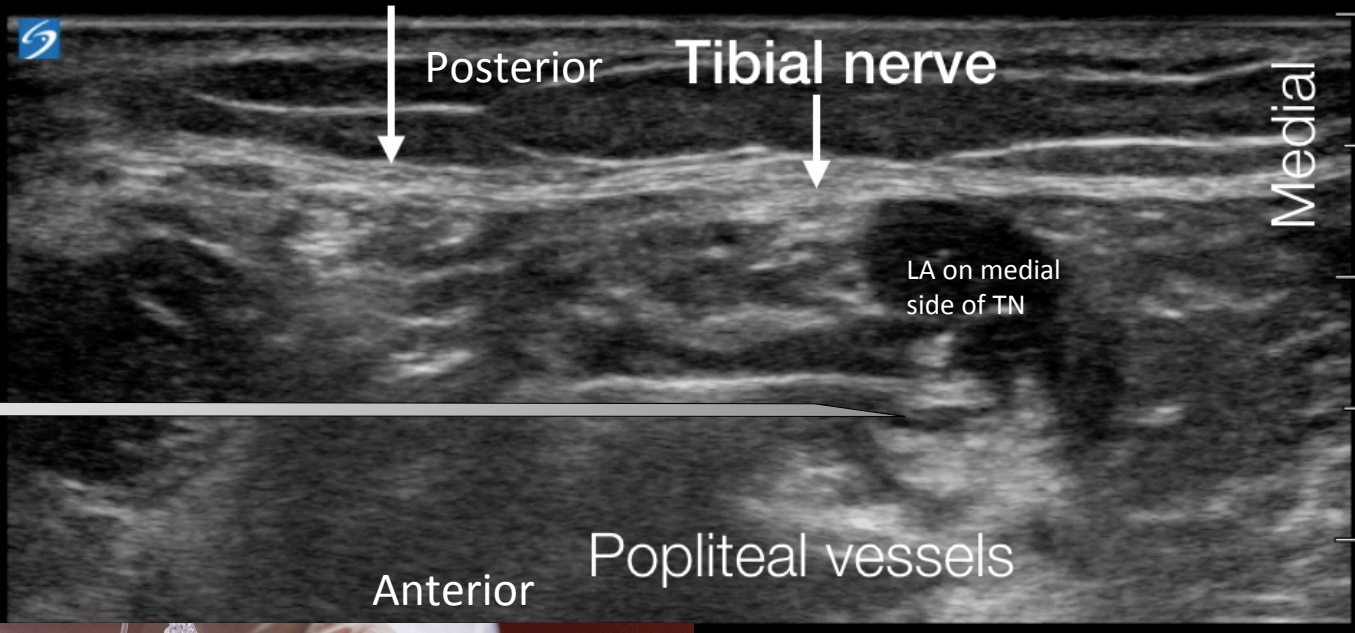
intermediate frequency linear or curvilinear transducer

**NEEDLE** 100 mm

# TIPS

Notes: 1. To minimize foot drop, consider injecting majority of volume around the tibial nerve or even around medial side of TN as recommended if using this block for knee replacement surgery. A further option is to inject ropivacaine 0.2% only, close to the CPN (even if a concentrated LA is used for surgical anesthesia around TN). 2. Obtaining surgical anesthesia of foot with PNB alone requires significant dose of local anesthetic, typically use this block for analgesia.

## Common peroneal nerve



Suggested trajectory for analgesic block only, move skin entry point anterior equivalent to depth of target