Distal Lower Extremity

Popliteal Nerve Block

- Innervates majority of distal lower extremity
- Supine Position
  - Popliteal pillow (or blankets/pillows) to raise leg to allow room for scanning in popliteal fossa
  - Position patient with head down for patient’s comfort
  - Knee bent

Popliteal Sciatic Block
Probe Placement:
- Place the probe with the dot lateral on the patient.
- Start scanning in the distal femoral portion of the popliteal fossa. This allows for the needle to enter from lateral to medial.
- US dot
  - Dot in bottom left corner allows needle movements in one’s hand to correspond with those on the screen.
- Local anesthetic to the skin
- In prescanning for ideal location to block the nerves
  - Look for where the tibial and common peroneal components separate.
  - Dorsiflex the knee and plantarflex the foot. Have patient relax.
  - Note the depth of the nerves and how much pressure is applied for ideal needle insertion site in skin.
- The needle should enter the skin parallel to the probe.
Popliteal

- Tendons
  - Sometimes tendons can appear nerve-like.
  - Tendons present and should disappear quickly. If it appears slowly, it is most likely a tendon.
- Scanning the sciatic nerve may require adjustment of the probe.
  - The nerve does not follow a straight line (anisotropic properties), so if you lose the image, adjust the axis of the probe (especially cephalad/caudad) to improve the image.

Saphenous AKA the Adductor Canal

- Sensory only component from femoral nerve
- Innervates part of the medial distal lower extremity
- Helpful for foot and ankle procedures
- Can be used as analgesia in knee procedures

Adductor Canal Block

- Infiltration at the adductor canal
- Lidocaine and/or bupivacaine
- Can be used for foot and ankle procedures.
Saphenous Positioning

- Patient supine
- Leg frog-legged
- Hip externally rotated, knee bent
- Return dot on screen to upper left
- Check that dot on probe is towards you
  - In this case, the dot is anterior on the patient, the needle is directed posteriorly
- This helps avoid passing through vascular structures to get to nerve