Lower Extremity Nerve Blocks


Nerve Block

Femoral
Patient position: Supine.
Transducer: Linear.
Needle: P1, 5-10 cm short length.
Common EMR obtained: Quadriceps muscle contraction.
LA: 10-20 ml.

Transducer Placement

Ultrasound Image

Reverse Ultrasound Anatomy

Anatomy

Initial transducer placement: Femoral crease, parallel and inferior to inguinal ligament, must feel the common FA.
Initial depth setting: 4 cm.

Landmarks: Common femoral artery and fascia ilaca (arrows).
Ideal view: Femoral nerve lateral to femoral artery, below fascia ilaca, proximal to bifurcation of the FA.
Number of injections: 1 or 2.

Technique: Nerve insertion in plane, lateral to medial, alternatively out of plane.
Ideal spread of LA: Cover fascia ilaca around the femoral nerve.

Saphenous
Indications: Anesthesia for knee surgery as a component of multimodal analgesia. In combination with sciatic nerve block for surgery below the knee. Patient position: Supine with leg abducted and externally rotated.
Transducer: Linear.
Needle: P1, 5-10 cm short length.
Common EMR obtained: If used, paresthesia of medial aspect of lower leg or vastus medialis. Twitch can be elicited.
LA: 10-15 ml.

Sciotic Subfascial level
Indications: Anesthesia and analgesia for surgery on femur, leg, and below the knee. Patient position: Prone, lateral or oblique (shown). Transducer: Linear or curved in larger patients.
Needle: P2, 5-10 cm short length.
Common EMR obtained: Twitch of calf or foot.
LA: 15-20 ml.

Sciotic Subfascial level
Indications: Anesthesia and analgesia for surgery on femur, leg, and below the knee. Patient position: Prone, oblique (shown) or supine with the knee flexed.
Transducer: Linear or curved in larger patients.
Needle: P1, 5-10 cm short length.
Common EMR obtained: Twitch of calf, foot or toes.
LA: 15-20 ml.

Common EMR obtained:

- Transducer placement:
- Needle placement by US
- Nerve spread:
- Needle tip position:
- Twitch

Suggested Standard Monitoring For Nerve Blocks

Intervention = Nerve Stimulation = Spreading Injegod Depot (SID)

Dermatomes

Osteotomes