# PLAN A BLOCKS Popliteal Level Sciatic Nerve

INDICATIONS: Leg, foot & ankle surgical anaesthesia & analgesia

**TARGET:** Sciatic nerve (ScN) or branches; common peroneal nerve (CPN) & tibial (TN)

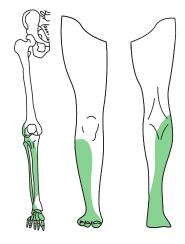
LOCAL: ≤20 ml plus local for skin

# KIT

- PPE (droplet precautions)
- Sterile gloves
- Linear US probe + cover
- Sterile gel
- 0.5% chlorhexidine
- LA for skin (+ syringe/needle)
- 80 mm 22G block needle
- 20 ml syringe for LA

# PRE-PROCEDURE

- Assistant, monitoring (ECG, SpO<sub>2</sub>, BP) & IV access
- USS machine on opposite side to operator
- Aseptic skin prep (allow to dry)
- Patient in lateral position facing US machine, operator behind patient (alternative positions include patient supine with leg elevated, or patient prone)









# **SCANNING**

- US probe transverse across posterior thigh (just proximal to popliteal skin crease)
- Identify popliteal artery & scan proximally to view ScN (superficial to artery & between/deep to hamstring muscles)
- Angle probe distally to optimise view of nerve(s)
- Scan proximally & distally to identify point ScN divides into

# STOP BEFORE YOU BLOCK

(Follow Prep, Stop, Block)

- LA to skin
- Block needle in plane (lateral to medial) through single skin puncture, deep to biceps femoris tendon
- Withdraw & reposition needle if paraesthesia
- Deposit ≤20 ml LA within circumneural sheath
- Inject deep to nerve initially, then superficial
- Low-pressure injection (<15 cmH<sub>2</sub>O), stop if LA spread not seen
- Aspirate every 5 ml & every needle reposition

# **EXAMPLE TIMINGS**

0.5% levobupivacaine (toxic dose 2 mg/Kg)

- Surgical block achieved in 45 min
- Surgical anaesthesia for 4+ hr
- Analgesia 12+ hr post block

# POST-PROCEDURE

- Monitor for minimum 30 min (as per AoA Standards of Monitoring)
- Test block after 10 min (sensation & motor)
- Document procedure, extent of block & post-block care

# **TESTING THE BLOCK**

NERVE	SENSORY	MOTOR
TN	Sole of foot	Plantarflexion foot & great toe
CPN	Dorsum of foot	Eversion of foot
	Site of surgery	



#### REFERENCES

Barron et al (2020) RA-UK Plan A Blocks Poster - Lower Limb Bowness et al (2021) International consensus on anatomical structures to identify on ultrasound for the performance of basic blocks in ultrasound-guided regional anaesthesia http://dx.doi.org/10.1136/rapm-2021-103004

Haslam et al (2021) Prep, stop, block': refreshing 'stop before you block' with new national guidance.

https://www.ra-uk.org/index.php/prep-stop-block

Nick Record, James Lloyd, Owen Lewis, James Bowness, Alasdair Taylor



