



University Hospital Galway

EMERGENCY DEPARTMENT

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Fascia iliaca block

(<https://galwayem.ie/index.php/index.php/guidelines/appendices/fascia-iliaca-block>)

Category

[Appendices \(https://galwayem.ie/index.php/index.php/guidelines/appendices\)](https://galwayem.ie/index.php/index.php/guidelines/appendices)

Indications, Contraindications and Precautions

Fascia iliaca block is indicated in all adult patients with painful hip and proximal femoral fractures requiring analgesia. Informed consent should be obtained if possible, as for all ED procedures. Allergy or anaphylaxis to local anaesthetics, open fractures, infection or inflammation at injection site and previous Femoral Bypass surgery are the only absolute contraindications to the technique. Other contraindications and precautions are as for any other use of local anaesthetics. Anticoagulation increases the risk of bleeding and haematoma formation but is not always a contraindication and clinical judgment should be used.

Equipment

The attached FIB Pack includes: four 10mL ampoules of levobupivacaine 2.5%, two 20mL syringes, an 18g plain needle, a disinfecting swab for skin, and a 22g pencil-point lumbar puncture needle. A nerve stimulator or ultrasound guidance is not required for the safe and effective practice of this method. The dosage of levobupivacaine is 40mL of levobupivacaine 2.5% for a regular adult or for patients weighing less than 50kg, use a dose of up to 2mg/Kg. Consider a reduced dose for the very elderly, frail or those with renal or hepatic impairment. The addition of adrenaline or mixture with other local anaesthetics does not significantly alter the success of the technique.

Method

Obtain informed consent. Uncover the area and prepare the skin (swab as needed). Slight external rotation and abduction is helpful (and is the common posture of these patients) but should not be forced if absent. The site for puncture is found by imagining or drawing a line from the pubic tubercle to the anterior superior iliac spine, dividing it into thirds, and finding a point 2.5cm below the junction of the middle and outer third. This point should also be at least 2.5cm lateral to the femoral pulse, which should also be palpated for safety (see Figure 1 below).

Image

<https://galwayem.ie/index.php/sites/default/files/images/block.png>

The LP needle is advanced perpendicular to the skin, then angled 60° caudally and advanced until two “pops” should be easily felt: the first represents the fascia lata and the second the fascia iliaca (see Figure 2 above). Reduce the angle between the needle and the skin to 30° and advance a further 1-2mm.

Safe injection. If in doubt, STOP Aspiration to confirm needle is NOT in a blood vessel. Slowly infiltrate the full volume of LA in small increments up to max 5mls LA should be Easy to inject and Painless to confirm not IN the nerve On ultrasound, MUST be seen spreading around nerve.

Levobupivacaine Pharmacodynamics

Onset of action: 10-20 minutes Duration of action: 12-20 hours (mean 16 hours) Safe maximum dose: 2mg/Kg equivalent dosing per concentration: Levobupivacaine 2.5mg/ml (0.25%): 0.8ml/Kg
Levobupivacaine 5mg/ml (0.5%): 0.4ml/Kg

Monitoring and Complications

Symptoms of CNS toxicity include agitation, nausea, blurred vision or tremor. Cardiovascular toxicity is rare but serious and can include hypotension, bradycardia and other arrhythmias. Vitals and ECG should be obtained prior to performing nerve block. Procedural monitoring of patient involves a minimum of pulse oximetry and clinical monitoring of patient condition. Prolonged monitoring is not generally necessary, beyond dressing the puncture site, ensuring the block has been successful and some screening questions for the above symptoms. Pain control should be assessed at 20-30 minutes to insure adequate analgesia, and further pain relief given as necessary.

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