

USS Guided Fascia Iliaca Block

Regional anaesthesia and analgesia blocking the femoral, lateral cutaneous, and obturator nerves



Anaesthesia Distribution. Left = dermatomes, middle = myotomes, right: osteotomes

Indications

- Femoral fracture
- Anterior thigh wounds requiring exploration and washout

Contraindications

- Local anaesthetic allergy
- Open wound/infection at injection site

Potential complications

- Allergy/anaphylaxis
- Direct neural trauma
- Vascular injury
- Vascular infiltration of local anaesthetic and haemodynamic collapse

Equipment

- Monitoring: continuous ECG and SpO₂
- Ultrasound machine with high frequency linear probe, superficial or nerve preset, image optimised before becoming sterile (patient, probe, preset, position, image optimisation)
- Sterile probe cover
- Sterile gloves
- Needles for injection (regional nerve block needle ideal and 23-25G needle)
- Low pressure extension tubing if available
- Local anaesthetic and dilutant 0.9% NaCl as described on next page

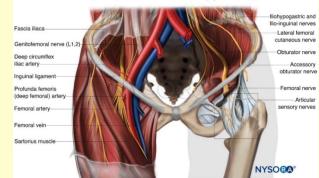
Procedure

- Place the Ultrasound machine on the opposite side of the bed to where the block is being performed.
- 2. Place the Linear Transducer just superior to the inguinal crease directly over the femoral nerve.

 Remember nerve, artery, vein from lateral to medial
- 3. Probe marker points to the patients right (your left)
- 4. Locate the femoral nerve and artery (the fascia iliaca lies above these structures)
- 5. Using 'In plane' needle visualisation insert the needle from lateral to medial under the fascia iliaca
- 6. Aspirate prior to injection to ensure it is not in the vessel
- 7. Slowly inject the Ropivacaine under the fascia iliaca you should see the hypoecoic fluid between the fascia and iliopsoas muscle, spreading down to surround the femoral nerve.

Post Procedure Care

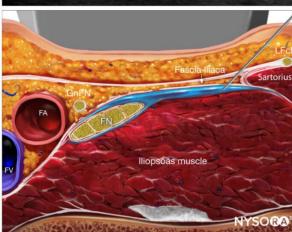
- 1. Simple dressing for injection site
- 2. Review of injection site for bleeding or pseudoaneurysm formation
- 3. Continue monitoring for 30mins post injection to ensure there is no cardiac arrhythmia
- 4. Consider opiate analgesia and immobilisation of lower limb in case of block failure











Ropivacaine Calculation Table

0.75% = 75 mg/10 mL

Dose = 3mg/kg to a maximum of 150mg (20mL)

Dilute with an equal volume of 0.9% NaCl

Body Weight	Maximum dose	Maximum	Total volume	Antidote for local anaesthetic toxicity		
	(3mg/kg)	Volume 0.75%	(Ropivacaine +	Intralipid 20% (100g/500mL)		
		Ropivacaine	0.9% NaCl)	Find in AED Resus drug room		
		(0.4mL/kg)		Initial dose	Repeat bolus at 5	Infuse at 0.25-
				1.5mL/kg over 1	min intervals x2	0.5mL/kg/min
				min		
5kg	15mg	2mL	4mL	7.5mL	7.5mL	1.25-2.5mL/min
6kg	18mg	2.4mL	4.8mL	9mL	9mL	1.5-3mL/min
7kg	21mg	2.8mL	5.6mL	10.5mL	10.5mL	1.75-3.5mL/min
8kg	24mg	3.2mL	6.4mL	12mL	12mL	2-4mL/min
9kg	27mg	3.6mL	7.2mL	13.5mL	13.5mL	2.25-4.5mL/min
10kg	30mg	4mL	8mL	15mL	15mL	2.5-5mL/min
12.5kg	37.5mg	5mL	10mL	18.75mL	18.75mL	3.13-2.25mL/min
15kg	45mg	6mL	12mL	22.5mL	22.5mL	3.75-7.5mL/min
17.5kg	52.5mg	7mL	14mL	26.25mL	26.25mL	4.38-8.75mL/min
20kg	60mg	8mL	16mL	30mL	30mL	5-10mL/min
22.5kg	67.5mg	9mL	18mL	33.75mL	33.75mL	5.63-11.25mL/min
25kg	75mg	10mL	20mL	37.5mL	37.5mL	6.25-12.5mL/min
27.5kg	82.5mg	11mL	22mL	41.25mL	41.25mL	6.88-13.75mL/min
30kg	90mg	12mL	24mL	45mL	45mL	7.5-15mL/min
35kg	105mg	14mL	28mL	52.5mL	52.5mL	8.75-17.5mL/min
40kg	120mg	16mL	32mL	60mL	60mL	10-20mL/min
45kg	135mg	18mL	36mL	67.5mL	67.5mL	11.25-22.5mL/min
≥50kg	150mg	20mL	40mL	75mL	75mL	12.5-25mL/min
75kg	-	-	-	112.5mL	112.5mL	18.75-37.5mL/min