Emergency Department
FEMORAL BLOCK CHECKLIST

AGH	
WRH	

Worcestershire Acute Hospitals NHS Trust

<Name> <Age> <DoB> <Hosp number> <NHS Number> <ED episode number>

BEFORE THE PROCEDURE

Indication: □ **Fracture Neck of Femur** □ **Other**

	Yes	No		Yes	No
Patient Identity checked as correct?			Any drug Allergies ?		
Appropriate Consent completed?			Safe Site of BLOCK insertion identified?		
Confirm SITE / SIDE of clinical abnormality by **two** clinicians – sign below			Are there any concerns about this procedure for the patient or its timing ?		
Risk of Coagulopathy & Medicines checked?					

TIME OUT

	Yes	No		Yes	No
Patient is adequately Monitored ?			Patient adequately analgesed ?		
Patient position is optimal			Team members identified & roles assigned		

STOP BEFORE YOU BLOCK

Have you got the Correct Side ?

Clinician 1 □**Right** □**Left**

Clinician 2 □**Right** □**Left**

DURING PROCEDURE

□ Hands washed and Sterile Gloves and Apron

□ Chlorprep 2% to skin and allowed to dry

WEIGHT □ Actual □ Estimate Kg

Local Anaesthetic: □ Lidocaine 1% □ Lidocaine 2% Volume:

□ Bupivicaine 0.25% □ Bupivicaine 0.5% Volume:

Time of Block (24hr)

Technique: □ Iliofascial □ Femoral

U/S Guided ? □ No □ Yes

Adverse Events □ No □ Yes (record below or in notes)

NOTES

SIGN OUT

	Yes	No		Yes	No
Dressing / Plaster			Vitals signs monitored for LA toxicity		
Verbal handover to Nurse			Analgesia prescribed		
Mandatory Post Procedure Vital Signs □ 5mins □ 10mins □ 15mins □ 30mins					

PROCEDURE

Date

Time (24hr)

STAFF (print & sign)

Operator

Assistant

These are recommended doses. These doses are NOT additive. When the recommended dose of one local anaesthetic has been reached no further local anaesthetic (of any type) should be given. Absorption varies depending on injection site / method of administration, and blood levels may increase in the elderly and unwell patient.

	Concentration (mg/ml)	Maximum Dose (mg/kg)	Maximum Volume (ml)						
			35Kg	40Kg	45Kg	50Kg	60Kg	70Kg	80Kg - 100Kg
Lidocaine 1%	10mg/ml	3mg/Kg	10.5	12	13.5	15	18	20ml (200mg)	
Lidocaine 2%	20mg/ml	3mg/Kg	5.25	6	6.75	7.5	9	10ml (200mg)	
Bupivicaine 0.25%	2.5mg/ml	2mg/Kg	28	32	36	40	48	56	60ml (150mg)
Bupivicaine 0.5%	5mg/ml	2mg/Kg	14	16	18	20	24	28	30ml (150mg)
Lidocaine 1% with adrenaline (1in 200000)	10mg/ml	7mg/Kg	24.5	28	31.5	35	42	49	50ml (500mg)
Lidocaine 2% with adrenaline (1in 200000)	20mg/ml	7mg/Kg	12.25	14	15.75	17.5	21	24.5	25ml (500mg)
Prilocaine 1%	10mg/ml	6mg/Kg	21	24	27	30	36	40ml (400mg)	

Local Anaesthetic Systemic Toxicity

Almost always occurs within minutes of injection of the local anesthetic and is rare. Neurologic symptoms typically precede cardiovascular symptoms in lidocaine toxicity. Cardiovascular symptoms typically present first in bupivacaine toxicity.

Causes:

- Injection of local anesthetic into the systemic circulation (either errantly as part of a regional block i.e. Bier block)
- Rapid absorption of local anesthetic injected into a highly vascular area
- Use of local anesthetic doses in excess of the maximum dose (typically occurs with multiple subcutaneous injections)
- **Consider diagnosis in any patient coming from outpatient surgical center with cardiac arrest.**

CNS Symptoms

Minor Signs/Symptoms

- Tongue and perioral numbness
- Parasthesias
- Restlessness
- Tinnitus
- Muscle fasciculations + tremors

Major Signs/Symptoms

- Tonic-clonic seizures
- Global CNS depression
- Decreased level of consciousness
- Apnea

Cardiovascular Symptoms

Early Signs

- Hypertension and tachycardia

Late Signs:

- Peripheral vasodilation + profound hypotension
- Sinus bradycardia, AV blocks
- Conduction defects (Prolonged PR, Prolonged QRS)
- Ventricular dysrhythmias
- Cardiac arrest

Management – toxicity is worsened by the presence of Hypercapnia, Hypoxia, Acidosis

- Any symptom of LA toxicity eg. perioral tingling – stop injection, IV access, cardiac monitor, consider resus room.
- Aggressive supportive care as required and may include-FiO_2 100%, hyperventilate, adrenaline, bicarbonate, benzodiazepines.
- High Quality CPR may be necessary particularly in the case of the longer lasting Local Anaesthetics such as bupivacaine.
- **Intralipid** (Resus fridge / ICU) Bolus: 1 – 1.5 ml/kg over 1 min. Can repeat bolus every 3 minutes up to a total dose of 3 ml/kg Infusion: 0.25 ml/kg/min. Continue infusion until haemodynamically stable for at least 10 minutes. Can increase infusion to 0.5 ml/kg/min if BP worsens.