



= YES = NO

(PLACE PATIENT LABEL HERE)

SURNAME: _____ NHI: _____

FIRST NAMES: _____

Date of Birth: ____ / ____ / ____ SEX: _____

TRAUMATIC HIP PAIN - ADULTS

(Suspected # neck of femur)

Date: _____ Time: _____ Assessment nurse: _____ Sign: _____

INCLUSION CRITERIA

Clinically suspected # NOF Neck of Femur

EXCLUSION CRITERIA

Any major injury or acute medical instability

Previous # NOF or THJR on same side as injury

Select Treatment Pathway on Whiteboard

Enter actual time started

Data collected for Ministry of Health

STOP! Not suitable for this Best Care Bundle

Select 'BCB removed' Treatment Pathway

Continue usual nursing cares

NURSING ASSESSMENT *ASAP*

Request Radiology ASAP Nurse initiated. E-radiology pathways → pelvis AP & lateral

History, examination, vital signs Document on Nursing Assessment Record

IV access and bloods ✓ General, ✓ Troponin ✓ G&H ✓ Coagulation studies for all patients

Pain score

At rest /10

On movement /10

Dementia / non verbal patients: RN impression:
Mild 0-3 Moderate 4-7 Severe 8-10
Pain score ≥ 5 → Fascia Iliaca Block prior to X-ray

Administer analgesia Formulary page 4

Contralateral hip flexion to 90° Any pain on flexion of unaffected hip?

No pain → Continue to radiology
 Pain → Fascia Iliaca Block prior to Radiology. Please bring procedure trolley to bedside

Provide patient information sheet

RED FLAGS *All red flags boxes must be populated* = YES = NO

Abnormal vital signs Collapse ? cause Seizure (pre / post fall) Other significant injuries / concerns

Head injury Signs of CVA (new) Decreased LOC (new) Chest pain (active / recent)

NO RED FLAGS

Continue Best Care Bundle

RED FLAGS PRESENT (ANY) → Senior Dr review ASAP (SMO / Senior Registrar)

Dr Name: _____ Sign: _____

Continue Best Care Bundle. Intervention if any: _____

Exit Care Bundle: Reason: _____

↳ Select 'BCB removed' in TP column, Electronic Whiteboard. This signals the medical staff

NEUROVASCULAR OBSERVATIONS *Perform on affected limb*

Time	:		:		:		:		
	Rt	Lt	Rt	Lt	Rt	Lt	Rt	Lt	
Leg									
Color									(P) Pink (D) Dusky (B) Blue (W) white
Temperature									(W) Warm (C) Cool
Sensation									(N) Normal (D) Dull (T) Tingling (A) Absent
Pulse									(S) Strong, (W) Weak (A) Absent
Cap Refill									(B) Brisk, (S) Sluggish
Pain score									
Nurse sign									

TRAUMATIC HIP PAIN BEST CARE BUNDLE PATHWAY



= YES = NO

(PLACE PATIENT LABEL HERE)

SURNAME: _____ NHI: _____

FIRST NAMES: _____

Date of Birth: ____ / ____ / ____ SEX: _____

ALL ITEMS ON THIS PAGE MUST BE ADDRESSED
Patients may not leave ED without completion of these checklists

EMERGENCY MEDICINE checklist

<i>Documentation</i>	<input type="checkbox"/> 'Traumatic Hip Pain Clinical Notes Proforma Booklet' completed for all <input type="checkbox"/> 4AT score completed in Éclair <input type="checkbox"/> Fascia Iliaca Block procedure note completed on page 3 ↳ Block not done → Reason: _____ <input type="checkbox"/> ACC form signed
<i>STRIDE trial</i>	<input type="checkbox"/> Meets study inclusion criteria <i>CeDDs and posters in ED</i> → Call 0204 154 0774 24/7
<i>Analgesia</i>	<input type="checkbox"/> Ongoing analgesia / fluid charted <i>Formulary on page 4. Minimise opioids</i>
<i>ECG</i>	<input type="checkbox"/> Viewed by doctor
<i>Bloods</i>	<input type="checkbox"/> Lab tests added: Fe / Ferritin / Troponin <i>Transfer to Ortho even if results are pending</i>
<i>Urinary catheter</i>	♀ <input type="checkbox"/> All ♂ <input type="checkbox"/> IDUC unless <input type="checkbox"/> able to use the urinal competently

ORTHOPAEDIC checklist

<i>Orthopaedic Team</i>	<i>Consultant:</i>
	<i>Registrar:</i>
	<i>House Officer:</i>
<i>Documentation</i>	<input type="checkbox"/> A - D planner started → <input type="checkbox"/> Resus status on front page documented <i>At very least check EM clinical notes proforma completed. In A-D planner: → tick as per EM notes</i> <input type="checkbox"/> Surgical consent done <input type="checkbox"/> 4AT score completed in Éclair <input type="checkbox"/> Usual medication / ongoing analgesia charted. <i>Minimise opioids</i> <input type="checkbox"/> Enoxaparin 20mg 18h00 today <i>Unless theatre today or contraindicated see page 4</i> <input type="checkbox"/> Maintenance fluid charted <i>for all patients</i>
<i>Pain review; Pain score (on movement)</i>	<input type="checkbox"/> None <input type="checkbox"/> Mild <input type="checkbox"/> Moderate <input type="checkbox"/> Severe 0 1-3 4-7 8-10 <input type="checkbox"/> Pain not controlled → Action taken: _____
<i>Theatre timing</i>	<i>Theatre to be planned within 24 hrs unless there is a need for medical optimisation Start treatment in ED e.g. dehydration, STEMI, AF rate control, infection Eat and drink if there is little or no chance of same day theatre</i> <input type="checkbox"/> Tomorrow → <input type="checkbox"/> Eat and drink until midnight <input type="checkbox"/> Defer for patient risk improvement → <input type="checkbox"/> Eat and drink
<i>Theatre checklist</i>	<input type="checkbox"/> CXR unless done < 48hrs <input type="checkbox"/> Group & Hold <input type="checkbox"/> Lab results reviewed: Including Fe, Ferritin, Troponin
<i>Ward placement</i>	<input type="checkbox"/> Ward 7 Please advise RN to book the bed ASAP <i>The bed cannot be requested prior to Orthopaedic sign on</i>
<i>Communication</i>	<input type="checkbox"/> Plan communicated to patient / family



= YES = NO

(PLACE PATIENT LABEL HERE)

SURNAME: _____ NHI: _____

FIRST NAMES: _____

Date of Birth: ____ / ____ / ____ SEX: _____

CLINICIAN
FASCIA ILIACA BLOCK PROCEDURE NOTE

FASCIA ILIACA BLOCK

INDICATIONS	CONTRAINDICATIONS
<input type="checkbox"/> All confirmed # NOF's <input type="checkbox"/> Unable to flex uninjured hip to 90 degrees prior to Radiology. <i>Inability to do this will result in inadequate films or delay</i> <input type="checkbox"/> Pain score > 5 at any time <i>Ideally performed prior to X-Ray</i>	<input type="checkbox"/> Warfarin: INR > 3 <i>*relative C.I - D/W Lead SMO. See note below</i> <input type="checkbox"/> Infection of the skin overlying the groin <input type="checkbox"/> Inguinal hernia <input type="checkbox"/> Known allergy to local anaesthetics

Please complete the procedure note

Other anticoagulants (e.g. Clopidogrel, Dabigatran, Rivaroxaban)*
Relative contraindication - Consider placement of FIB under USS guidance. To be performed by senior clinician

PROCEDURE NOTE KPI for this bundle

Clinician	Time: Sign: _____
Consent	<input type="checkbox"/> Verbal <input type="checkbox"/> Written <input type="checkbox"/> Not obtained: Treatment provided under right 7(4) of the code of health & disability services consumer's rights
Ropivacaine	<input type="checkbox"/> Ropivacaine 0.75% 20 mL <i>diluted up to 40 mL.</i> <i>See FIB quick guide in the FIB pack or BCB page EM intranet for landmarks & technique</i> <input type="checkbox"/> Documented on MedChart
Pain score PRE	<input type="checkbox"/> None <input type="checkbox"/> Mild <input type="checkbox"/> Moderate <input type="checkbox"/> Severe <small>0 1-3 4-7 8-10</small>
Pain score POST <i>20 mins after FIB</i>	<input type="checkbox"/> None <input type="checkbox"/> Mild <input type="checkbox"/> Moderate <input type="checkbox"/> Severe <small>0 1-3 4-7 8-10</small>

NO FRACTURE NOF ON PLAIN RADIOLOGY ■ N/A

Further management & imaging depends on clinical suspicion for fracture. MRI is the ideal test, however timely access is unlikely. The DHB supports high resolution CT in ED as first advanced imaging modality

<input type="checkbox"/> High clinical suspicion for # <i>e.g. ++ pain on rotation</i> <i>↳ Further imaging indicated</i>	<input type="checkbox"/> Low suspicion for # and <input type="checkbox"/> Discharge unlikely <i>e.g. frail patient, other injuries</i>	<input type="checkbox"/> Low suspicion for # and <input type="checkbox"/> Discharge likely
---	---	--

<input type="checkbox"/> CT scan: EM to arrange <i>'Key to clinical decision <2 hrs on request. Radiology will aim to expedite'</i>	<input type="checkbox"/> AT&R admission preferred <input type="checkbox"/> Gen Med if no beds <input type="checkbox"/> Adequate ongoing analgesia	<input type="checkbox"/> ED OBS <input type="checkbox"/> Multidisciplinary review <input type="checkbox"/> Adequate ongoing analgesia
---	---	---

<input type="checkbox"/> Fracture confirmed ↳ <input type="checkbox"/> Ortho → <input type="checkbox"/> Checklist page 2/3 done <input type="checkbox"/> No fracture on CT ↳ <input type="checkbox"/> AT&R → <input type="checkbox"/> Gen Med if no beds	<input type="checkbox"/> Mobilised safely & all discharge criteria met ↳ <input type="checkbox"/> Discharge <input type="checkbox"/> Failed to mobilise or other concerns noted ↳ <input type="checkbox"/> AT&R <input type="checkbox"/> Gen Med if no beds
---	--

FORMULARY / MEDICATION OPTIONS

CHECK ALLERGY STATUS AND SEE MEDSAFE OR OTHER TEXT FOR FULL LIST OF CONTRAINDICATIONS**

ALL MEDICATIONS MUST BE CHARTED ON THE NATIONAL / ELECTRONIC MEDICATION CHART

ANALGESIA OPTIONS *For use in ED and ADU*

Medication	Dose	Route	Freq	Notes
Paracetamol	1 g	Oral / IV	4-6 hourly	Reduce dose if < 50 kg. Max 4g / day First done standing order
Morphine as per protocol	0.5 - 2 mg	IV	Q 3 mins	Ensure RR > 8. Alternative Oxycodone
Fentanyl as per protocol	5 - 20 mcg	IV	Q 3 mins	Option if CrCl < 15mL/min
Morphine elixir	2.5 - 5 mg	Oral	2-4 hrly PRN	CrCl >30 mL/min
Rapid release oxycodone (e.g. Oxynorm ® liq or cap)	2.5 - 5 mg	Oral	2-4 hrly PRN	CrCl 15-30 mL/min. Max 30mg/24h. Safer than morphine in renal impairment. Constipating. (Liquid formulation available in CD safe) 2.5mg Liquid oxynorm equivalent to 5mg oral morphine
Ropivacaine 0.75%	20 mL		FIB	Diluted in 20mL Saline. Please document in E-prescribing. Only administered by Dr/NP/CNS
Maintenance fluid	80 - 100 mL	IV	hourly	Normal Saline or Plasmalyte. For all patients regardless of NBM status

ANTIEMETICS *In order of preference*

Ondansetron	4 mg	IV / Oral	6 hrly/ PRN	Standing order. Contraindication: Long QT syndrome
Domperidone	10 mg	PO	8 hrly	Avoid cyclizine / metoclopramide

CONSTIPATION PROTOCOL *prescribe both*

Docusate & Senna	2 tablets	Oral	BD	
Lax sachets	1 sachet	Oral	BD	

ANTICOAGULATION *for all patients on the day of admission, unless same day theatre or contra-indications*

Enoxaparin	20 mg	Subcut	18h00	Contraindications: Same day theatre, Already on Warfarin or other DOAC, active bleeding, coagulopathy
------------	-------	--------	-------	---

AGITATION / DELIRIUM OPTIONS *in order of preference. May help to minimise symptoms, but most important to stop / minimise medications that worsen confusion e.g. Tramadol, cyclizine. Esp Centrally acting or anticholinergic drugs*

Haloperidol	0.25 - 0.5 mg	Oral / IM	Nocte / PRN	Can repeat in 2 hrs. Max 1mg in 24 hrs
Risperidone	0.5 mg	Oral	Nocte / PRN	Liquid if patient can't swallow. Can repeat in 2 hrs. Max 1mg in 24 hrs.
Quetiapine	12.5 mg	Oral	Nocte / PRN	Suitable for Parkinson's Disease. Can repeat in 2hrs(Max 25mg in 24 hrs)

STAPH AUREUS *Pre-operative decolonisation*

Chlorhexidine 4% liquid		Topical	STAT	Full body wash to be applied on admission to Orthopaedic ward
Povidone-iodine 10%		Topical	STAT	Apply to both nostrils on admission to the Orthopaedic ward

ADVERSE REACTIONS *See cognitive aid*

Intralipid 20% <i>Kept on antidote shelf, main drug room (Acutes)</i>	1.5 mL / kg	IV	Bolus / 1 min Repeat q 3-5 min	Refractory cardiac instability / arrest as a result of local anaesthetic toxicity. Initiate standard ACLS
<i>Then</i>	0.25 mL/kg/min	IV	Until stable	PRN if remains unstable then increase to 0.5 mL/kg/min for refractory hypotension. > 8 mL/kg unlikely beneficial. Includes anaphylaxis or delayed pancreatitis
Methylene blue trihydrate 1%	1 - 2 mg/kg (0.1 - 0.2 mL/kg)	IV	Bolus / 5 min Flush with saline	Symptomatic methaemoglobinemia. (hypoxaemia, dyspnoea, confusion), or consider if MetHB > 20% Contra-indicated in G6PD def. Reduce dose if renal impairment. Usually responds to single dose. Can repeat Q 30 - 60 mins. Risk of serotonin syndrome w SSRI's

NSH All confirmed cases admitted at NSH, regardless of their domicile DHB.
All NOF's (except transfer from WTH ED) to come via ED even if the diagnosis has been confirmed in the community

WTH Refer Orthopaedics in the patient's domicile DHB. **FIB prior to transfer**