Hip Fracture Peri-operative Management Guidelines

June 2019

PERIOPERATIVE CARE OF THE PATIENT WITH A HIP FRACTURE

Preoperative preparation

1. All patients with a fragility fracture of the proximal femur are to be admitted to the hip fracture unit, Ward 34.
2. All patients are to have all details entered onto Bluespier and MUST have their BPT time (36h from admission to the Emergency Department, not the ward or the time of XR) clearly entered, next to their name on the theatre list. All hip fractures should be placed either first on the list or in the morning session unless clinically indicated otherwise.
3. All patients will have had a 12 lead ECG and the following blood tests performed in the Emergency Department:

Full blood count	Urea and electrolytes	Liver function tests
Bone profile	Clotting (if indicated)	Group and save

4. Please check all blood results and ECG and ensure that any abnormal or concerning results are acted upon promptly to prevent any delay to theatre or safe care.
5. All patients require a chest X ray which needs to be reviewed on admission to the ward.
6. All patients with a history of malignancy need a radiograph of the whole femur, not just the proximal end. This should be done automatically, like the CXR by the time the patient arrives on the ward, but needs checking and if not done needs requesting and checking for malignant deposits.
7. Ensure careful documentation of anticoagulant/antiplatelet medication, including indication for administration and last dose. Hold oral anticoagulants on admission except for clopidogrel which is continued throughout..
8. All patients must have the following scores completed: Charlson Comorbidity, Rockwood Frailty, Nottingham Hip and 4AT delirium scoring (the latter is postoperative).

Analgesia

Adequate analgesia provision is central to effective hip fracture care. All patients should be considered for fascia illiaca block in the Emergency Department. (Post block observations to be continued on ward and entered on Vitalpac). With regard all agents, please bear in mind the effect of renal injury on dose selection. For ongoing analgesia please prescribe:

1. IV Paracetamol (15mg/kg QDS) - 1g QDS may be inappropriate (too high a dose) for many hip fracture patients so ensure dose is appropriate for patient weight.
2. Codeine 30-60mg po QDS – with Macrogols 1 sachet BD and Senna 15mg ON
    a. Caution using codeine with renal impairment – consider lower dose
3. Oramorph 5mg po PRN for breakthrough pain
    a. Caution using morphine with renal impairment – consider oxycodone (oxynorm) 2.5mg OD
4. NSAIDs to be avoided, unless patient is already established on them and renal function is normal/stable

Nutrition

1. Standard pre-operative fasting regime as per trust guidelines:
    a. 6 hours for all food and non-clear fluids and 2 hours for clear fluids
2. Make attempts to ascertain time/position on list and plan nutrition accordingly
3. **ALL** patients can have clear fluids until 6am at least, and **ALL** staff should encourage oral intake of fluids pre-operatively
4. All patients must be considered for supplementation and this must be prescribed where appropriate.

Fluid status

1. All patients require preoperative IV fluids prescribed on admission. Ensure this keeps up with maintenance and output through accurate fluid balance.
2. Insert a urinary catheter with hourly urometer where clinically indicated (e.g. AKI, CKD)

Consenting

1. Consent taken and limb marked by member of operating team, **with reference to imaging and the patient, at the bedside.**
2. All patients require formal capacity assessment. Lack of capacity should be clearly documented. If capacity is unlikely to return, then they should be treated in their best interest, in accordance with trust policy and the Mental Capacity Act. Ideally this would also involve family and it is the policy of the hip fracture unit to discuss the proposed treatment with relatives where possible.
3. Discussions around treatment escalation and resuscitation status should be had with patient +/- family and reviewed on the ward round along with the STEPS escalation form.

Medical/anaesthetic concerns

1. All medical concerns to be managed in conjunction with medical and orthogeriatric teams
2. Potential anaesthetic concerns should be discussed with list anaesthetist at earliest opportunity, or with the 4958 bleep holder overnight

GOLDEN PATIENT

If the patient is identified as the golden patient, please inform the anaesthetic night team, to ensure they are prepared to go first on the list the next day

POST-OPERATIVE CARE

Theatre recovery

Ensure prescription of:

1. **Analgesia** – this is identical to preoperative regimen, do not load with IV morphine.
2. **PRN anti-emetics** – IV ondansetron 4mg PRN.
3. **DVT prophylaxis** – LMWH as per trust guidelines
4. **Ongoing fluids**

Check block height if regional anaesthetic techniques were used.
Dressings to be checked before discharge from recovery.
All patients should be returned to Ward 34 on a pressure relief air mattress.

Fluids

1. Encourage eating and drinking.
2. Recognise that some patients may require 24 hours (or more) of IV fluids in the post-operative period.
3.

Patient assessment

1. Early Warning Score as per trust protocol.
2. Four hourly pain assessment charts must be completed for ALL patients. This includes:
    a. Visual analogue score: at rest and on movement
    b. Vomiting score
    c. Sedation score
3. Physiotherapy assessment (ROM, power and proprioception) – aiming for early mobilisation 1 day post-op:
    a. Set mobilisation criteria are as follows:

EWS <1 and stable	Pain score <4	Vomiting score <1
Sedation score <1	No sensory or motor blockade	

Postoperative investigations

1. Postoperative X ray for arthroplasty patients – review and **document findings**
2. Blood tests – day 1:

Full blood count	Urea and electrolytes	Liver function tests
Bone profile	Parathyroid hormone	Vitamin B12
Folate	Thyroid function tests	Vitamin D

3. Blood tests – day 3 and 4; FBC and U and E