Hip fracture care in Wales – past, present and future

Dougie Russell
1988

- Cardiff Royal Infirmary
- William Diamond Ward
How we (used to) do it

- Long delays before admission to often unsuitable beds
- Low priority on trauma list with multiple cancellations
- Unsupervised junior surgeons often operating at inappropriate times
How we (used to) do it

• Lack of medical input peri and post operatively
• Slow mobilisation
• Poor attention to nutritional needs
• Long hospital stays
• Poor integration with social care
Walking ability

- 45% no aids
- 25% one aid
- 23.5% two aids / frame
- 2.5% wheelchair

National Hip Fracture Database Report 2011
Place of residence

- 74% own home or sheltered housing
- 20% residential or nursing home

National Hip Fracture Database Report 2011
“We come into the world under the brim of the pelvis and we go out through the neck of the femur”

A medical admission complicated by a broken bone!
June 2009

• Hip pain
• Knee pain
• Back pain

Hip fracture
Focus on Orthopaedics: Fractured Hip Pathway

Continual review for pain and appropriate administration of analgesia

General Trauma Unit

Protocol for Paramedic Initial Assessment

Radiology Referral Criteria

Clinical Assess #1

General Trauma Unit definition

Contact bed manager / trauma co-ordinator

Anaesthetics assess -request only necessary tests etc. (clinical audit data)

General Principles:
- Senior review
- Prediction for next stage of pathway

EDD Pathology tests

Keep Well definition

Discharge definition

Return to function definition

Secondary Prevention definition - link to NSF for older people

Pre-op checklist and discharge plan document

Falls prevention service/support/guidance

Standards / KPIs:
1. A&E arrival to trauma ward admission - 2 hours max
2. Admission/diagnosis to Surgery - within 24 hrs
3. Mobilisation - within 24 hours of surgery

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We do not have tariff!

“Deliver the nationally agreed patient outcomes in relation to fractured neck of femur focus on pathway in particular evidence of effective pain control, time to theatre and discharge to home following treatment”
Hip fracture
The management of hip fracture in adults

BOAST 1 Version 2

Background and Justification:
Over 70,000 hip fractures occur annually in the UK. The total cost of care is over £2 billion with 10% mortality at 30 days and up to 30% mortality at one year. Their care is dependent on close multidisciplinary relationships between many specialties due to the complex nature of these patients, both in terms of their medical co-morbidities and their ability to rehabilitate.

Inclusion: All patients sustaining a fragility hip fracture.

Standards for Practice
1. Secondary prevention, anti-resorptive therapy for osteoporosis and falls assessments are effective in reducing further fragility fractures and must be an integral part of the fracture care.
2. Hip fractures should be managed by a multidisciplinary team including orthogeriatricians, orthopaedic surgeons, anaesthetists, nursing and allied health professionals with expertise appropriate for these frail patients.
3. Patients who cannot weight bear and who may have a hip fracture should be offered magnetic resonance imaging (MRI) if intrapelvic pelvic and lateral hip X-rays are negative. If MRI is not available within 24 hours or is contraindicated, consider computed tomography.
4. Assess the patient's pain and offer immediate analgesia on presentation at hospital and regularly as part of routine nursing observations throughout admission, including patients with cognitive impairment. Ensure analgesia is sufficient to allow mobility necessary for investigations and for nursing care and rehabilitation.
5. Identify and treat comorbidity co-morbidities immediately so that surgery is not delayed. Intravenous fluids should be administered and appropriate blood tests undertaken. Preparatory assessment should follow local protocols including those pertaining to anticoagulants.
6. Perform hip fracture surgery on the day of or the day after admission on a planned trauma list. Consultants or senior staff should supervise trainees and junior members of the anaesthesia, surgical and theatre teams when they carry out hip fracture procedures.
7. Operate on patients with the aim to allow them to fully weight bear (without restriction) in the immediate postoperative period. Offer patients mobilisation with a physiotherapist at least once a day and assessment on the day after surgery.
8. From admission, offer patients a formal, acute, orthogeriatric or orthopaedic ward-based Hip Fracture Programme that includes orthogeriatric assessment, rapid optimisation of fitness for surgery, early identification of individual goals for multidisciplinary rehabilitation to recover mobility and independence, and to facilitate return to pre-fracture resilience and long-term wellbeing.
9. Assess patient's risk of delirium and delirium by actively looking for cognitive impairment when patients first present with hip fracture and perform regular re-assessment.
10. If a hip fracture complicates or precipitates a terminal illness, the multidisciplinary team should still consider the role of surgery as part of the palliative care.
11. Patients should be assessed and treated for their risk of venous thromboembolism and pressure ulcers.
12. Offer patients (or, as appropriate, their carer and/or family) verbal and printed information about treatment, care and rehabilitation.
13. Each hospital should submit data to the National Hip Fracture Database to monitor its performance against national benchmarks and quality standards.

NICE clinical guideline 124 (2011) - The management of hip fracture in adults
NICE technology appraisal 181 (2011) - Secondary prevention of osteoporotic fragility fractures in postmenopausal women
NICE clinical guideline 152 (2010) - Delirium
NICE clinical guideline 42 (2009) - Delirium
NICE guideline 124 (2011) - Falls

Stryker
I consider that my Review has highlighted that the treatment of some older people in Welsh hospitals is shamefully inadequate. Organisations must do more to learn from those who are doing things well.
How are we doing?
The future?

- Admission
- Preparation for theatre
- Surgery
- Post-op rehabilitation
- Discharge
Admission

• ? Pre alert to A&E

• Rapid transfer and fast track to assessment and X-ray

• Adequate pain control

• Admit to appropriate area in trauma unit
Pain control

- Crucial time is from A&E to admission to trauma ward
- Minimise use of opiate analgesia
- Blocks can be very helpful
Preparation for theatre

• Early assessment by senior anaesthetist / orthogeriatrician

• Ensure adequate hydration / nutrition

• Avoid unnecessary investigations which will delay surgery
Surgery

- Surgery on a planned trauma list within 24 / 36 hours of admission
- Suitable grade of surgeon / supervision
- Aim to allow full weight bearing in immediate post-operative period
- THR in active patients

1.6 Surgical procedures
1.6.1 Operate on patients with the aim to allow them to fully weight bear (without restriction) in the immediate postoperative period.
1.6.2 Perform replacement arthroplasty (hemiarthroplasty or total hip replacement) in patients with a displaced intracapsular fracture.
1.6.3 Offer total hip replacements to patients with a displaced intracapsular fracture who:

   were able to walk independently out of doors with no more than the use of a stick and
   are not cognitively impaired and
   are medically fit for anaesthesia and the procedure.
Surgery
Post op. rehabilitation

• Mobilisation should start the day after surgery if clinically appropriate
• Multidisciplinary team caring for patient including social services
• Early involvement of family
Prevention

• Many of these fractures are preventable with appropriate screening and treatment

• All fragility fracture patients should be assessed
Expectations have changed!

• We can do better

• ERAS is developing in the management of hip fracture

• Implementation of focus on pathway, NICE guidelines and BOA standards crucial
Thank you