Improving
Hip Fracture care

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Matron Sarah Joseph
Miss Fiona Middleton
Themes

- Delays in fracture neck of femur treatment
- Lack of priority
- Medically “unfit”
Problems

• A&E: lengthy stay on trolley
• X-rays: going back to x-ray department for CXR
• Lack of treatment of medical problems e.g. uncontrolled AF, reversal of anticoagulation in patients on warfarin
• Delays for investigations e.g. echocardiogram
• Anaesthetic delays e.g. clopidogrel
• Prioritisation of other trauma cases
Potential solutions

- A&E Fast tracking
- Clerking pro forma
- Prompt and accurate treatment – high INR, AF, chest infection
- Theatre list organisation- fit patient first
- Ideally anaesthetic review the night before
- Estimated Discharge Date (EDD)
Culture of change:

Local audits done by junior doctors (FY1)

Bone protection:
16% 2007
74% 2009

VTE prophylaxis:
20% 2006
100% 2009

They felt unable to tackle delays to theatre
Improving quality

- Clerking booklet
- Standardisation
- AMTS
- Easy coding of medical problems
- Results
- Post-take ward round
Medication History
(including OTC / herbal remedies and any recently stated or ceased medication)

<table>
<thead>
<tr>
<th>Drug (generic name)</th>
<th>Formulation</th>
<th>Dose</th>
<th>Frequency</th>
<th>Source of info?</th>
<th>Please tick</th>
</tr>
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<tbody>
<tr>
<td>Patients own medication</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>From relative / carer (who)?</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Recent hospital discharge summary?</td>
<td></td>
<td></td>
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<td></td>
<td></td>
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<tr>
<td>From Patient's repeat prescription (File photocopy in notes)</td>
<td></td>
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<tr>
<td>From GP referral letter (Please file in notes)</td>
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<tr>
<td>From speaking to GP</td>
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</tr>
<tr>
<td>From GP fax (Please file in notes)</td>
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<tr>
<td>From MARS sheet</td>
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<tr>
<td>Other: (Please specify)</td>
<td></td>
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Does the patient have communication difficulties YES / NO
Does the patient use a compliance device YES / NO

Allergies / Side Effects: (please document details)

Social History

Smoking:
Never Ex (when)
Current ......... / day for ....... years
Referred to Smoking Cessation Advisor
Yes / No / N/A

Alcohol:
Current ......................... U/week
Previous Max ......................... U/week
Advised regarding alcohol withdrawal? Y / N

Accommodation:
House
Stairs:
No rail / Rail Left / Right / Both Stair lift

Flat (State floor) .........................
Bungalow
Residential Home
Nursing Home

Support:
Marital status
Lives alone Lives with:
Family
Warden Controlled

Services:
None
District Nurses
Home Help
Meals on Wheels
Carers
Community Mental Health
Other .........................

Mobility:
Independent Stick Frame Immobile

Transfers:
Independent Aids Physical Assistance 1/2

Family History

Systems Enquiry

Examination

A Airway: Patent / obstructed
B Breathing: RR ....... /min O2 Sat ....... % on ....... L PEFR if relevant: ....... L/min
C Circulation: HR ....... /min Lying BP .................. Sitting/standing BP ..................
D Disability: Alert / responds to Voice / responds to Pain / Unresponsive
E Other: Temperature: ..................°C BM: .................. Weight: ..................

Urinalysis: pH ....... Protein ....... Blood ....... Leucocytes ....... Nitrates ....... Ketones .......

General Appearance: .................................................................
Jaundice / Anaemia / Cyanosis / Clubbing / Lymphadenopathy / Oedema

CVS

Pulse / Rhythm BP
Apex JVP
HS ||

Bruit's

RS

Trachea

Expansion

Percussion

Breath Sounds
Abdomen

PR Examination

Neuro

<table>
<thead>
<tr>
<th>Glasgow Coma Score</th>
<th>Abbreviated Mental Test Score</th>
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<tbody>
<tr>
<td>Best Motor</td>
<td>Eye Opening</td>
</tr>
<tr>
<td>None</td>
<td>1 Never</td>
</tr>
<tr>
<td>Extends</td>
<td>2 To pain</td>
</tr>
<tr>
<td>Abnormal flexion</td>
<td>3 Inappropriate</td>
</tr>
<tr>
<td>Flexion</td>
<td>4 Confused</td>
</tr>
<tr>
<td>localises</td>
<td>5 Normal</td>
</tr>
<tr>
<td>Norma</td>
<td>6</td>
</tr>
<tr>
<td>Total:</td>
<td>/15</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Total:</td>
<td>/10</td>
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Central: Right Left

Peripheral:

<table>
<thead>
<tr>
<th>Arms: Tone: Power:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Legs: Tone: Power:</td>
</tr>
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</table>

<table>
<thead>
<tr>
<th>Reflexes</th>
<th>Right</th>
<th>Left</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biceps C5.6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Supinator C5.6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Triceps C7.8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Knee L3.4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ankle S1.2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Plantars</td>
<td></td>
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</tbody>
</table>

Other eg. Skin ulceration / rashes / limb / joint positions and range of movements

ORTHOPAEDIC

Appearance of limb

Inspection: 1 Skin integrity 2 Deformity 3 Swelling 4 Dislocation 5 Scars

Palpation: Warmth Sensitivity Peripheral pulses present Tenderness / pain

Movement: Active movements Full Partial Limited Passive movements Full Partial Limited

X-rays Joint above and below injury Two views

Findings

Summary
DIAGNOSIS / PROBLEMS

PLAN

☐ Bloods ☐ X-match / G&S ☐ Consent ☐ Marked
☐ Booked for theatre

Information given to patient and / or relatives:

Doctor's signature

RESULTS

<table>
<thead>
<tr>
<th>Tick if taken, or admission</th>
<th>Date &amp; Time</th>
<th>Normal Range</th>
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</thead>
<tbody>
<tr>
<td>U&amp;E</td>
<td>Na</td>
<td>135 - 145</td>
</tr>
<tr>
<td></td>
<td>K</td>
<td>3.5 - 6.2</td>
</tr>
<tr>
<td></td>
<td>Urea</td>
<td>2.6 - 6.7</td>
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<tr>
<td>Glucose</td>
<td>Creatinine</td>
<td>44 - 120</td>
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<tr>
<td></td>
<td>Glucose</td>
<td>4.5 - 7.8</td>
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<tr>
<td>LFTs</td>
<td>Bilirubin</td>
<td>to 17</td>
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<tr>
<td></td>
<td>Alk. Phos</td>
<td>36 - 100</td>
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<tr>
<td>Bone</td>
<td>ALT</td>
<td>to 43</td>
</tr>
<tr>
<td></td>
<td>Albumin</td>
<td>32 - 45</td>
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<tr>
<td>CRP</td>
<td>Adj. Ca.</td>
<td>2.12 - 2.62</td>
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<tr>
<td>Troponin</td>
<td>PO</td>
<td>0.8 - 1.5</td>
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<tr>
<td>FBC</td>
<td>CRP/ESR</td>
<td>0 - 10</td>
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<tr>
<td></td>
<td>Trop. T</td>
<td>&lt;0.01 at 12hrs</td>
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<tr>
<td>INR</td>
<td>Hb</td>
<td>M 13.5 - 19</td>
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<tr>
<td></td>
<td>MCV</td>
<td>F 11.5 - 16.5</td>
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<td>Plts</td>
<td>80 - 100</td>
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<tr>
<td></td>
<td>INR</td>
<td>150 - 400</td>
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<tr>
<td>INR</td>
<td>0.9 - 1.2</td>
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<tr>
<td>G&amp;S / X-Match</td>
<td>G&amp;S / X-Match</td>
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<tr>
<td>Blood Gases</td>
<td>Air or % O2</td>
<td>7.35 - 7.45</td>
</tr>
<tr>
<td></td>
<td>pH</td>
<td>4.6 - 6</td>
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<tr>
<td></td>
<td>pCO2</td>
<td>11 - 14</td>
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<tr>
<td></td>
<td>pO2</td>
<td>22 - 30</td>
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<tr>
<td></td>
<td>HCO3</td>
<td>Base Excess</td>
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<tr>
<td></td>
<td></td>
<td>Between -2.8 -12</td>
</tr>
<tr>
<td></td>
<td>Lactate</td>
<td>0.7 - 2.1</td>
</tr>
<tr>
<td>Blood Cultures</td>
<td>Site Time</td>
<td></td>
</tr>
</tbody>
</table>

☐ CXR: ☐ ECG:
# POST - TAKE WARD ROUND / SENIOR REVIEW

**Date** ………….. **Doctor** ……………………………………………………

**Time** …………..

**Diagnosis**

---

**Dalteparin prescribed**

```
Y / N
```

**State reason if NO** …………………………………………………...

**Anti-embolic hosiery**

```
Y / N
```

**State reason if NO** …………………………………………………...

**Hip Fracture Patients**

**Bone health reviewed, Bisphosphonate & Calcium D3 Forte prescribed**

```
Y / N
```

**State reason if NO** …………………………………………………...

**Fortisip Multi-fibre prescribed**

```
Y / N
```

**Completed by:** ……………………………………………………………

**Print name** ……………………………………………………………

---

**Disposal & Handover**

<table>
<thead>
<tr>
<th>Investigations Seen</th>
<th>Investigations needing review / Ordering / Actions required:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Handed over to</td>
<td>Treatment ceiling: [ITU HDU NIV] DNAR Form completed: [Y / N]</td>
</tr>
</tbody>
</table>
Striving for excellence

• Induction for all
• Consultant delivered care
• Nursing excellence
• Relationship-centred dementia care
• Optimising the patients’ and relatives’ experiences of their care

‘Patient Safety is our top priority’
Orthogeriatrician

- Routine consultant review (7 sessions a week, no internal cover)
- Prompt medical assessment and optimisation
- Liaison with trauma anaesthetist and surgeon
- DNAR and discussion of risks with patient/NOK
- Specialist falls and bone health assessment
- EDD and co-ordination of MDT
Estimated Date of Discharge (EDD)

- EDD set on day of admission
- MDT documentation - stickers put in all notes
- Effective decision making
- Co-ordinates: specialist care, primary and secondary care MDT, social services, and manages patients’ and relatives’ expectations
Driving Forces for success

- Matron and Ortho-geriatrician
- Rapid Hip Fracture Pathway
- National Hip Fracture Database and BPT
- Orthopaedic and Anaesthetic colleagues – wanting to improve – Joint assessment and management protocol
- High quality nursing care – including nurse-led discharge
- MDT and ICT teamwork
Achievements

Time to theatre

KHT Jan 2010
KHT Mar 2011

41
28
Reason for surgery >36 hours

- Lack of theatre time
- Orthopaedic reason
- Medical reasons
- Other

Aug 09 - Jan 10
Feb 10 - July 10
Achievements

Average Length of Stay

KHT Jan 2010

KHT Mar 2011
Achievements

- Orthogeriatric falls assessment:
  - KHT Jan 2010: 80
  - KHT Mar 2011: 98

- Bone health assessment:
  - KHT Jan 2010: 63
  - KHT Mar 2011: 91

KHT Jan 2010
KHT Mar 2011
A&E audit

% of patients with a documented pain score

- Reaudit: 100%
- Audit: 18%

Time to Analgesia Received or Offered

- Within 20 mins: Audit 4%, Reaudit 20%
- Within 30 mins: Audit 12%, Reaudit 52%
- Within 1 hour: Audit 37%, Reaudit 96%

Time to Admission

- Within 2 hours: Audit 0%, Reaudit 18%
- Within 4 hours: Audit 45%, Reaudit 98%
Challenges ahead

• Pressure area care

• Cover for leave

• ‘Managing Matron’

• Administrative support – long term outcomes

• Delay by junior doctors (all grades) – inadequate assessment and treatment of pre-op medical issues

• NICE guidance and Fracture Liaison Service
The key to success…

Teamwork