Perioperative Care of Older People

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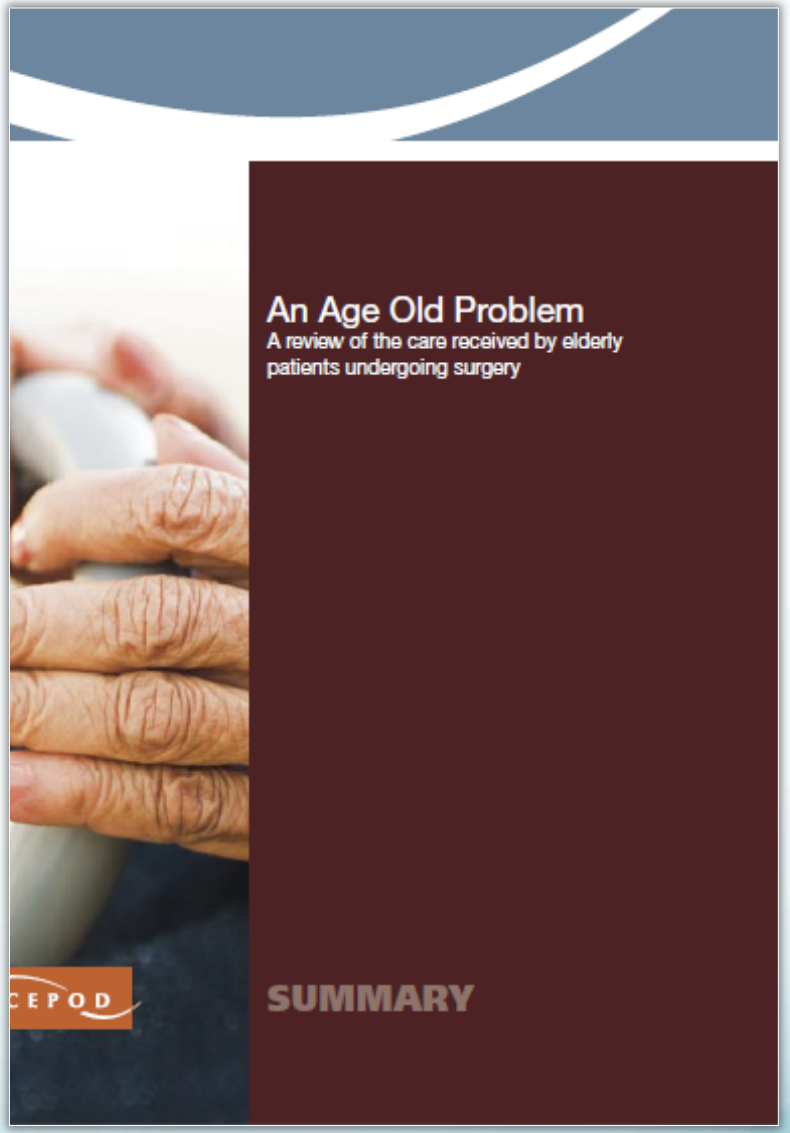
#G4J14
@ElderlyMedEd

‘This report makes depressing reading’



Why do perioperative care?

- Huge clinical challenges
- Highly valued role
- Great potential impact
- Inter-specialty collaborative working

About me

Worked with T&O since 2006

Now lead Orthogeriatrician for HEFT

A very slow runner!

Raising money for Alzheimer's

www.justgiving.com/Helen-Chamberlain2

Collaborative working

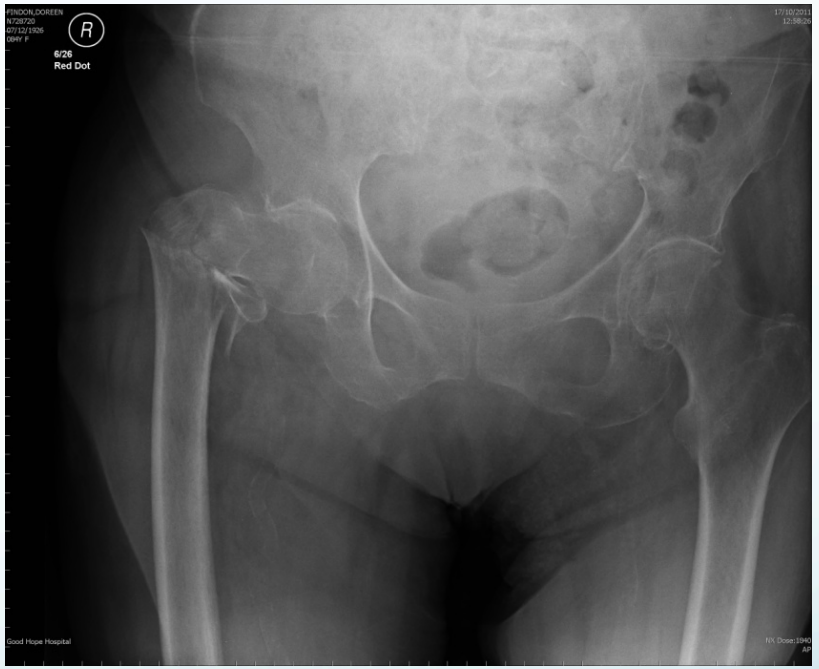
Issues in perioperative care

- Pre-operative assessment & optimisation
- Fluid balance & nutrition
- Anticoagulation, antiplatelets and VTE
- Pain management
- Delirium
- Audit and quality improvement
- Elective surgery

‘There’s a #NOF in ED’

Immediate management

- Imaging
- Pain relief
- Fluids
- Pressure relief
- Use of assessment pathway

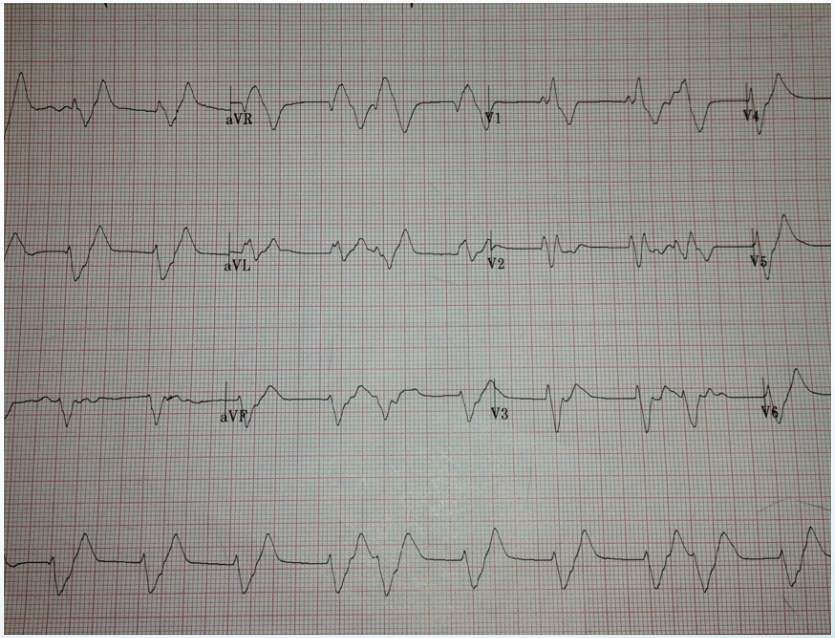


Pre-op assessment

- Review history of fall
- Collateral history
- Co-morbidities & medication
- Cognitive status
  - Delirium, dementia or both
- Functional status & social network

Pre-op assessment

- MEWS score
- Cardio-respiratory exam
  - Heart murmurs
  - ECG
  - CXR if actively unwell
  - Echocardiogram?
- If you can normally climb stairs, you are fit for GA



Pre-op assessment

- Review bloods
  - Correct electrolyte abnomalities/AKI/rhabdomyolysis
  - ABG if hypoxic
- Fluid balance
- Pain control
- Treat intercurrent infection
- Review medication
- Delirium risk factors & warn family

Pre-op assessment

- Diabetes increases risks of surgery
- Minimise NBM period
- Continue OHG
- Reduce insulin dose as meals are missed
- Minimise VRIII

- http://www.diabetes.org.uk/Documents/Professionals/Reports%20and%20statistics/Management%20of%20adults%20with%20diabetes%20undergoing%20surgery%20and%20elective%20procedures%20-%20improving%20standards.pdf

Consent & Capacity

- Is there a disorder of mind or brain?
  - If no, capacity presumed present
- If yes, can they, relevant to decision to be made:
  - Understand
  - Retain
  - Weigh up
  - Communicate
- If no to any, then capacity shown to be absent

Consent & Capacity

- If they are delirious, capacity usually absent
- Urgent surgery, therefore cannot wait until capacity is regained, so proceed in best interests

- If they have dementia or learning difficulties, but are not delirious, capacity MAY be lacking
- Apply test if unsure & document your assessment

Fluids & Nutrition

- Fluid resuscitation pre-op improves outcomes
  - High risk of AKI
  - Use crystalloids, which one depends on losses
- Post-op: balance between continuing fluid replacement vs removing drips to allow mobility
- Look out for the Mini-GEM
- http://www.nice.org.uk/guidance/CG174

Fluids & Nutrition

- All patients should have nutrition screening done by nursing staff
  - So read what they have written and act on it!
- Sip feeds improve outcomes
- Consideration of NG feeding
- Constipated patients don't eat much!

- http://www.nice.org.uk/guidance/cg32

Managing anticoagulants

- Do I need to reverse it?
- Do I need to cover with LMWH at treatment dose?
- Do I need to give LMWH prophylaxis?
- Do I need to give unfractionated heparin?
- When do I restart it?

Reversing anticoagulants

- Warfarin & Vit K antagonists
  - If major haemorrhage use prothrombin complex
  - If not use vitamin K

- NOAC (Rivaroxaban, Dabigatran, etc)
  - No specific antidote!
  - Tranexamic acid & PCC have been used but evidence limited
  - Fluids & anaemia management

- http://www.escardio.org/communities/EHRA/publications/novel-oral-anticoagulants-for-atrial-fibrillation/Documents/EHRA-NOAC-Practical-Full-EPEuropace-2013.pdf

LMWH use

- Treatment dose
  - Cover post-op while reloading with warfarin
  - Recent (<3/12) VTE, thrombophilias, metallic valves
  - Acute coronary syndrome
- Prophylaxis dose
  - Anyone not going back on warfarin/NOAC post-op
  - Those on warfarin for AF before restarting
- Ask before restarting warfarin/NOAC

Unfractionated IV heparin

- Patients with metallic mitral valves
- Tricky to use due to need for APTT monitoring
- Ask cardiology ward for help

Antiplatelet drugs

- Theoretical risks of blood loss
- Several observation studies show risk is low
  - Eg http://www.ncbi.nlm.nih.gov/pubmed/21329923
- Drugs cannot be stopped if recent (<12/12) coronary stenting
- May need platelet transfusion if bleeding
- Fluid & anaemia management important

Anaemia management

- Transfuse if Hb <80 g/l
- Higher threshold (<100 g/l) if
  - Recent ACS/angina/stroke
  - Delirium with no other cause & pain controlled
- Otherwise oral iron + Vit C but watch out for constipation

Pain management

- Ask your patient every time you see them & note their response
- If they can't tell you, ask someone else
  - Nurse
  - Physio
  - Relatives
- Do they look like they are in pain?
- Use other tools eg Abbey Pain Scale

Food for thought

- 236 patients with #NOF, 66 with dementia
- Patients with dementia received significantly less opioid than those without
- Opioid use was not associated with incident delirium in demented or non-demented patients

- Sieber et al, JAGS 2011
- http://onlinelibrary.wiley.com/doi/10.1111/j.1532-5415.2011.03729.x/abstract

Pain management

- Regular paracetamol
- PRN codeine/morphine
  - Regular if >2 PRN doses daily
  - MST if >30mg QDS of codeine
  - Patches if non-compliant & agitated
  - Watch for constipation
- Nerve block, PCA
- Use your Acute Pain Team
- No NSAIDS!

Delirium

- 25% incidence in our patients
- Hypoactive more common
- Routine clinical assessment
- CAM/4AT can be used

Delirium

- Pain
- INfection
- Constipation, urinary retention
- Hydration
- Medication
- Electrolyte disturbances

Delirium

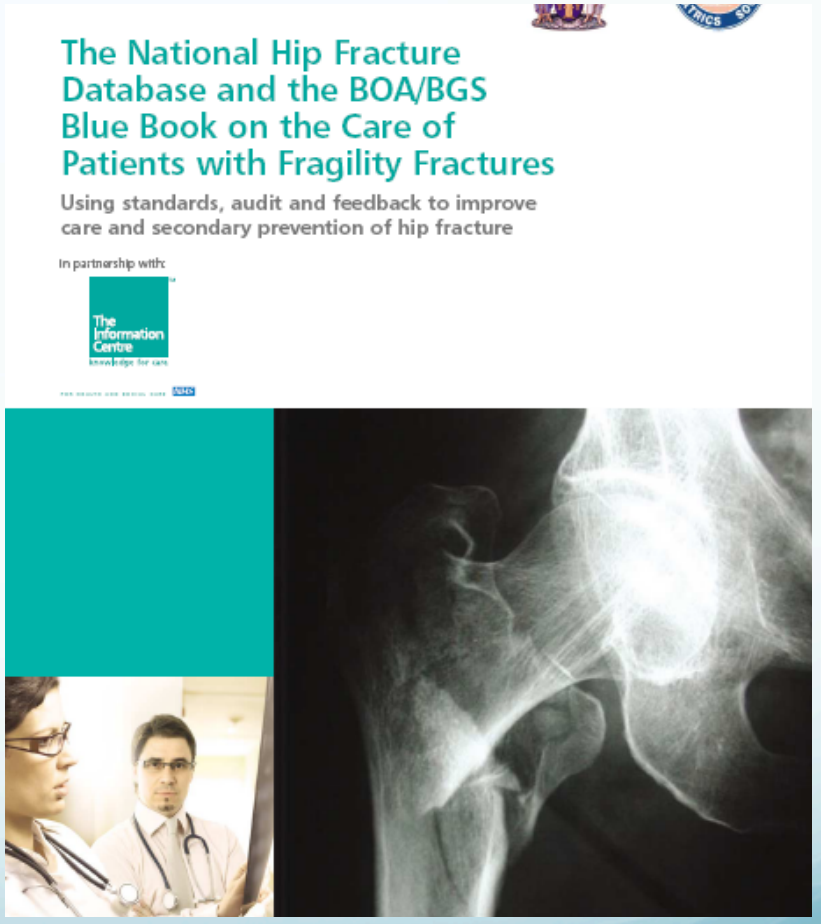
- **P**ain
- **IN**fection
- **C**onstipation, urinary retention
- **H**ydration
- **M**edication
- **E**lectrolyte disturbances

Delirium

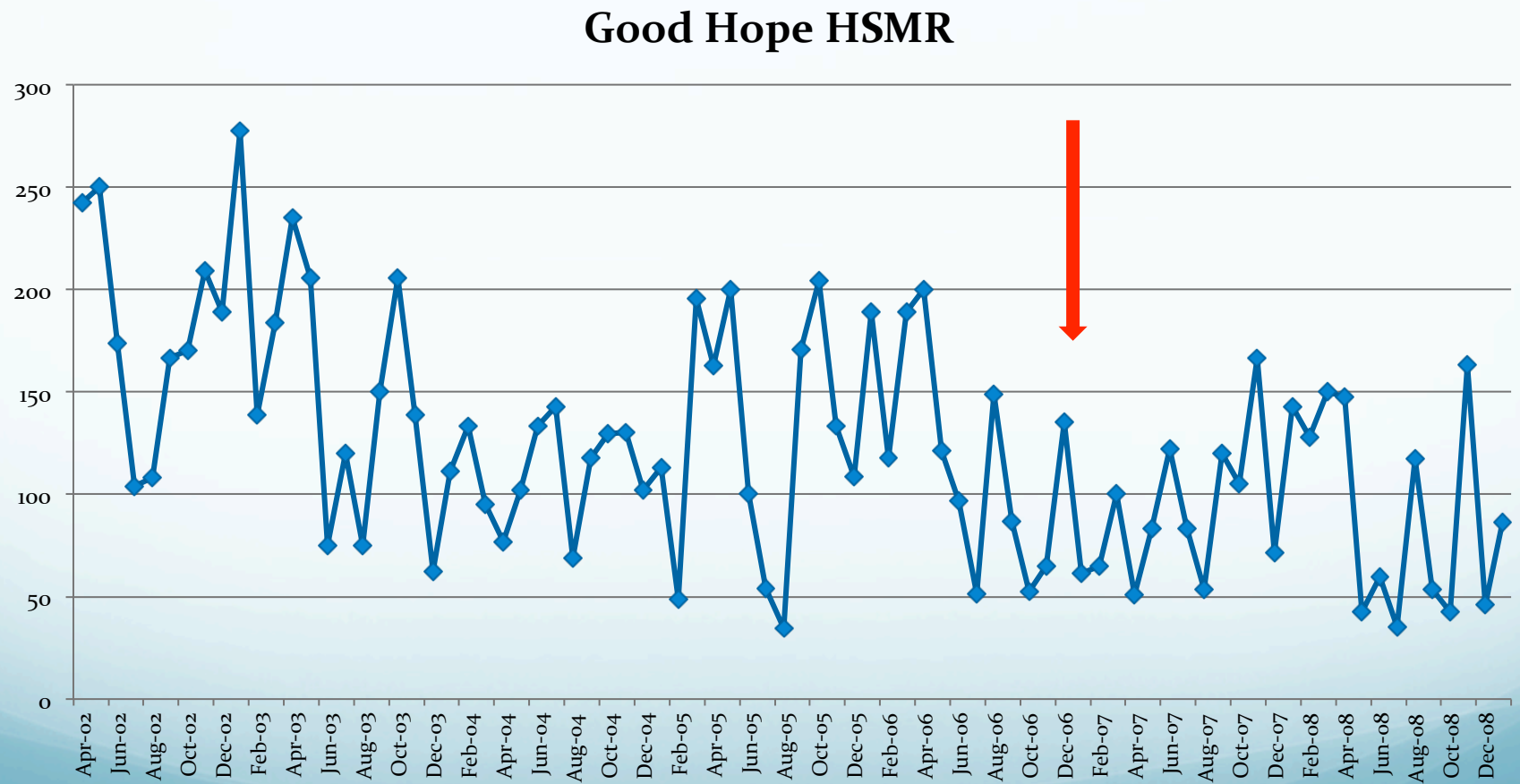
- If agitated, try pain relief first
  - Oramorph
  - Patches (buprenorphine, fentanyl)
- Remove drips and catheters if possible
- Correct what you can according to PINCHME
- Ask for help
- Reassure family

Continuous Audit

- Admitted under agreed protocol
- Joint orthopaedic/geriatric care
- Surgery within 36h if fit enough
- Pre- & Post-op cognitive screening
- Geriatrician review within 72h
- Geriatrician-led MDR rehab
- Falls & Bone Health assessment



I want to be remembered for this:



Further reading

- www.nhfd.co.uk

- Check your hospital's performance!

What about elective surgery?

- CGA before elective surgery is associated with
  - Less pneumonia
  - Less delirium
  - Better recognition of MDT needs
  - Shorter LOS
- 'POPS' models being developed around the country
- Harari et al, 2007
- http://ageing.oxfordjournals.org/content/36/2/190/T3.expansion.html

And finally...

- Orhtogeriatrics really IS the most fun you can legally have in a hospital

- I get to learn all the best orthopaedic surgeon jokes...

Always keen to get help…

- How many orthopods does it take to change a lightbulb?

- Dark ?cause. Refer to orthogeriatrician