

An audit on time to theatre for Neck of Femur (NOF) patients in a tertiary, trauma centre in Western Australia: comparison to accepted national standards

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Aims

All NOF patients over 6 months (January 2017 to June 2017)

Primary Outcome

ED → arrival in theatre.

2 Parameters tested

- % of patients operated within 36 hrs
- % patients delayed past 48hrs

Secondary Aim

Identify the reasons for delayed operative fixation

Any system failures that should be addressed?

Methods

- Retrospective audit
- NOF registry database
- Data reviewed for all NOF patients admitted over 6 months.
- Try establish the reason for delay.

Results

Table 1 – Basic Data

Total Number of Patients with fracture neck of femur	219
Total No. of patients included in the audit	203
Patients excluded from the audit	16
a. Not operated	11
b. Admission times not available due to missing files	5

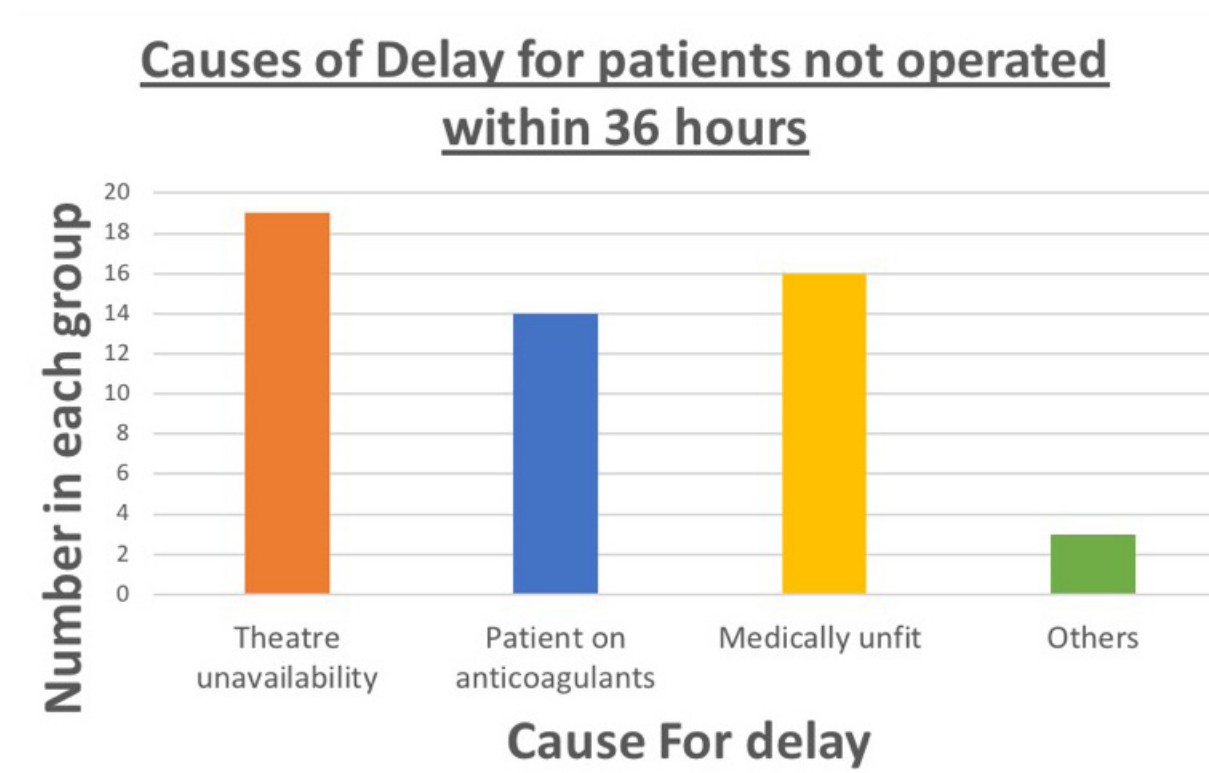
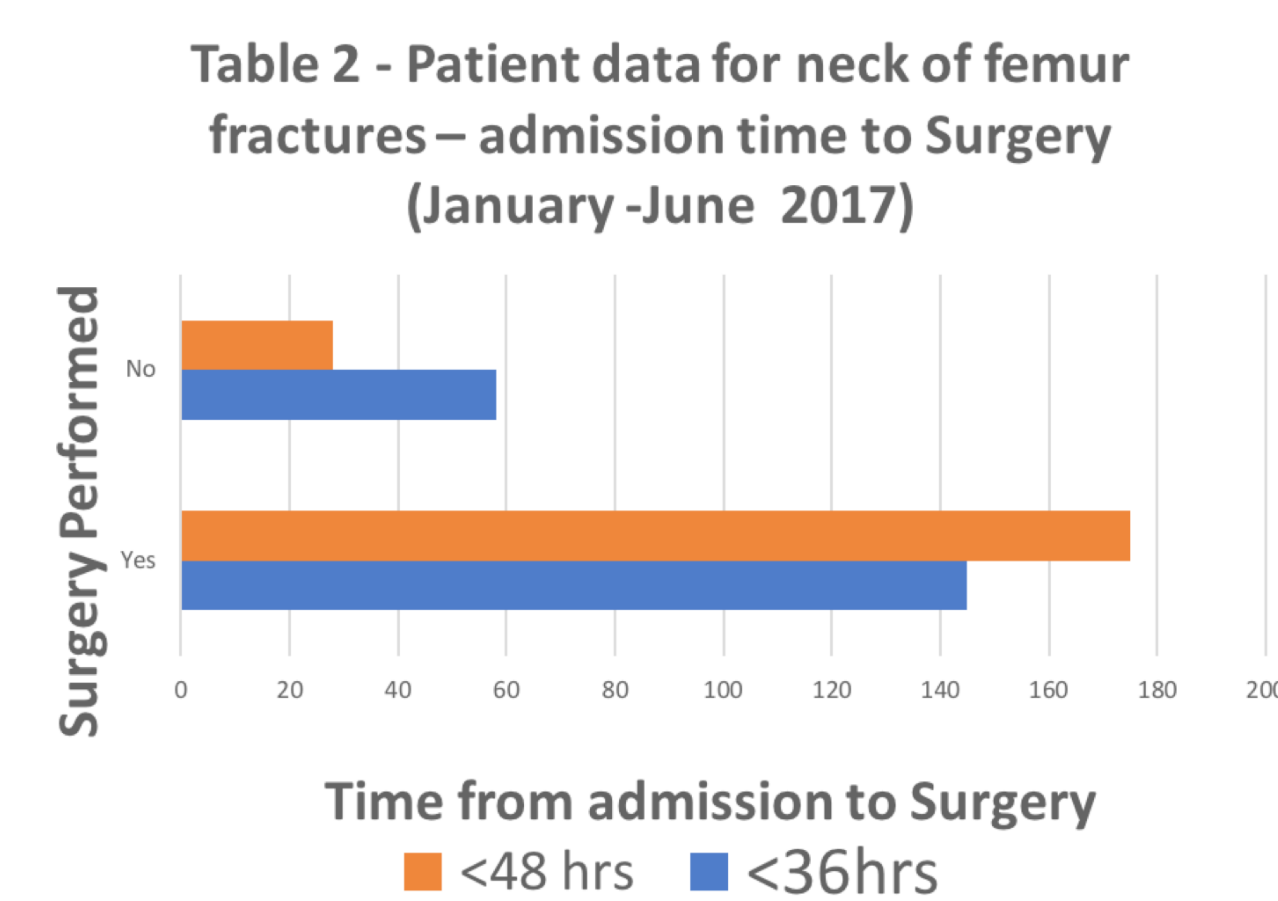


Table 2 - Patient data for neck of femur fractures – admission time to Surgery (January - June 2017)

Time from admission to Surgery	Yes	No	Total number of patients in study
<36hrs	145 (71.4%)	58 (28.5%)	203
<48hrs	175 (86.2%)	28 (13.7%)	203

Medical causes identified

Identified Medical Causes	Number of Patients
1. Fast AF	7
2. CCF	6
3. NSTEMI	3
4. Sepsis	2
5. LRTI	2
6. Subdural hematoma	1
7. Multiple Myeloma	1

Non-medical causes

- 1) Radiographer not available
- 2) Consent issues because of demented patient
- 3) Family took time for decision of surgery.

Discussion and summary

- Hip fracture can cause significant morbidity and mortality
- Early surgery = improved outcomes
- Best outcomes if operated within 48 hrs.
- The Australian New Zealand Hip Fracture Registry (ANZHFR) -within 48 hours of admission.
- The National Institute for Health and Care Excellence (NICE)-surgery on the day of their admission, or the day thereafter.
- The AAGBI also recommends surgery within 48 hours of hospital admission
- Acceptable versus unacceptable reasons for delaying the operative fixation of a NOF patient

Appendix A: ANZHFR recommendations

Acceptable reasons:

Haemoglobin < 80gm/l , Na>150mmol or <120mmol , reversible coagulopathy, uncontrolled DM ,uncontrolled or acute onset LVF, correctable arrhythmia with rate >120/min , chest infection with sepsis.

Unacceptable reasons :

Variable surgical expertise, lack of theatre space, awaiting ECHO, minor electrolyte abnormalities.

Appendix B: NICE recommendations

Correctable comorbidities:

Anaemia, anticoagulation, volume depletion, electrolyte imbalance, uncontrolled DM, uncontrolled heart failure, correctable cardiac arrhythmia or ischaemia, acute chest infection , exacerbation of chronic chest conditions.

Recommendations

- 1) Protocols and specialist input for patients on anticoagulation therapy.
- 2) Access to a dedicated emergency theatre dedicated for NOF.