

Rib fractures in older patients A review of practice at a District General Hospital

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Aims Optimising the management of older patients with rib fractures at a District General Hospital.

Methods This retrospective quality improvement project included patients >65 years old admitted with rib fractures over a six-month period (01/01/2025–01/07/2025). Data was collected from the electronic health record (Cerner) and outcomes were analysed. Data is presented as median (range). Statistical analysis conducted using GraphPad Prism.

Results

- 81 patients were included, age 82 (65-100) years
- Fifty patients (61%) had a clinical frailty score (CFS) ≥ 4
- The average battle score was 23, twenty-seven (33%) patients having a battle score of >25 - higher risk of adverse outcome
- Ten patients required chest drains

Anticoagulation

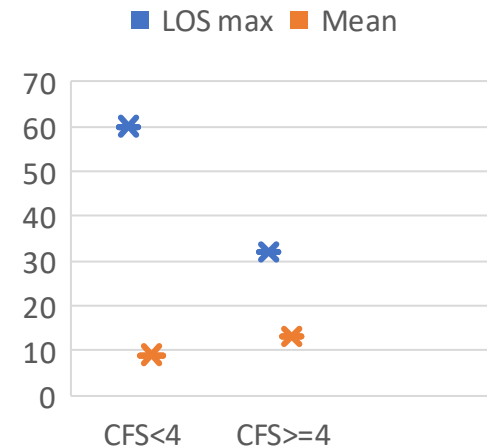
- 28 patients (34%) were on anticoagulation - 26 on Direct Oral Anticoagulants (DOACs) and 2 on Warfarin
- Indications: 1 for a metallic heart valve, 4 for venous thromboembolism and twenty-three (82%) for atrial fibrillation.

Analgesia

- Multimodal analgesia was used, with 93% (n=75) requiring lidocaine patches, 42%(n=34) using morphine and 75%(n=61) including oxycodone
- 7% (n=6) patients did not require opioid analgesia
- 22% (n=18) received rib blocks

Morbidity and mortality

- Four patients died as a sequelae of their injuries, 2 from hospital acquired pneumonia, 1 with expansion of a subdural haemorrhage with mass effect and 1 with respiratory failure.
- The deceased patients were 88 (84-92) years old, with a battle score of 30 (25-34) and a CFS of 4



Length of stay (LOS) –

- LOS for frail patients (CFS ≥ 4) was 13 (1-32) days
- LOS for patients with CFS < 4 was 9 (1-60) days (p= 0.1003).

Conclusion- Frail patients with complex co-morbidities experienced longer LOS. Establishing a ‘Rib fracture pathway’ will optimise patient care. The LOS did not reach statistical significance, likely due to small sample size.