

# AN ANALYSIS OF TRAUMATIC RIB FRACTURES ADMITTED TO A MAJOR TRAUMA CENTRE: MORBIDITY, MORTALITY AND ANALGESIC MANAGEMENT

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## Background

Rib fractures in trauma are associated with significant mortality and morbidity. Adequate analgesia is crucial in preserving effective respiratory dynamics and improving outcomes. This analysis was designed to analyse the morbidity, mortality and analgesic strategies employed to highlight areas of future development for the trust.

## Aim/Objectives

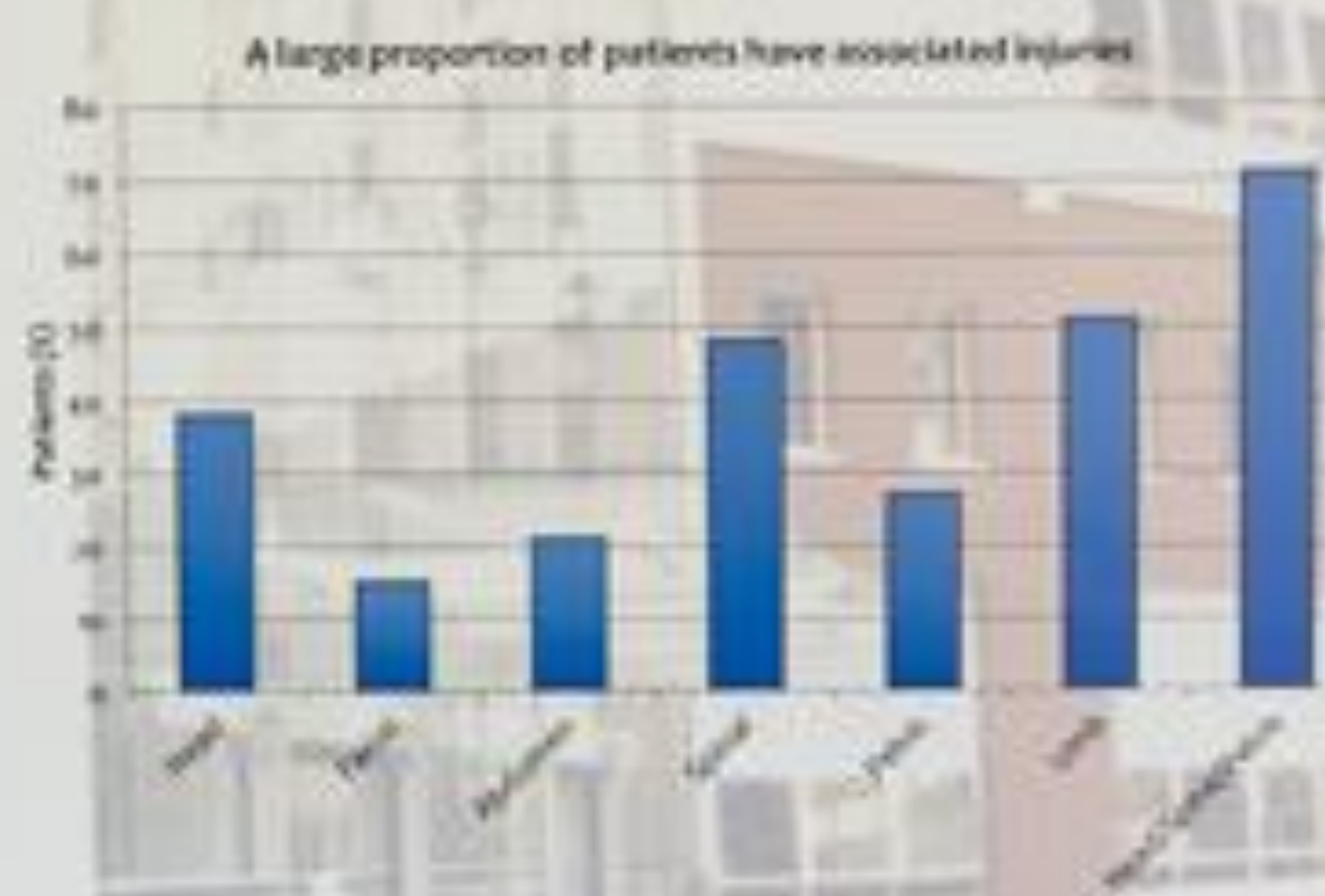
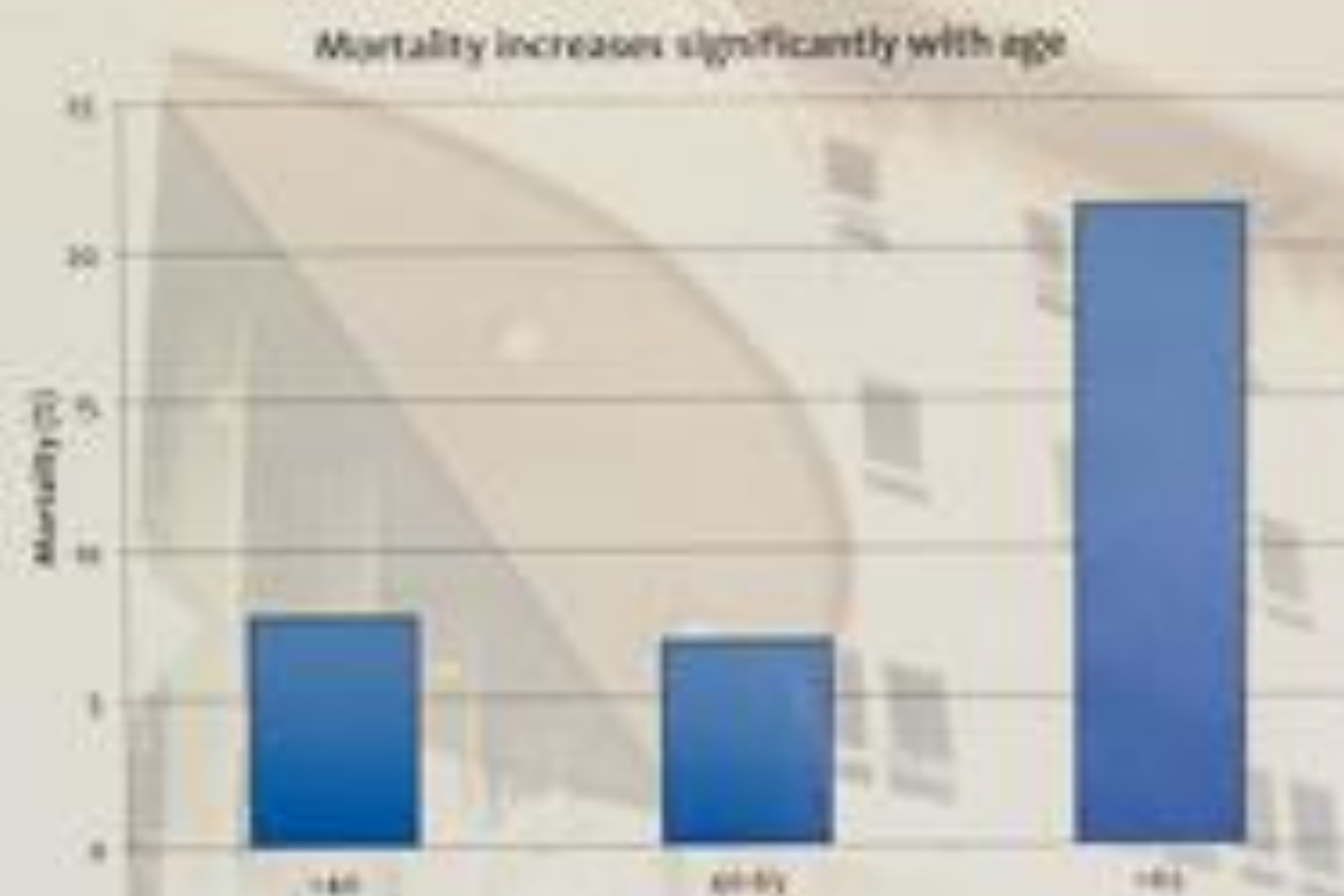
To review our current practice of rib fracture management including analgesia in patients admitted to a large tertiary Major Trauma Centre (MTC).

## Methods

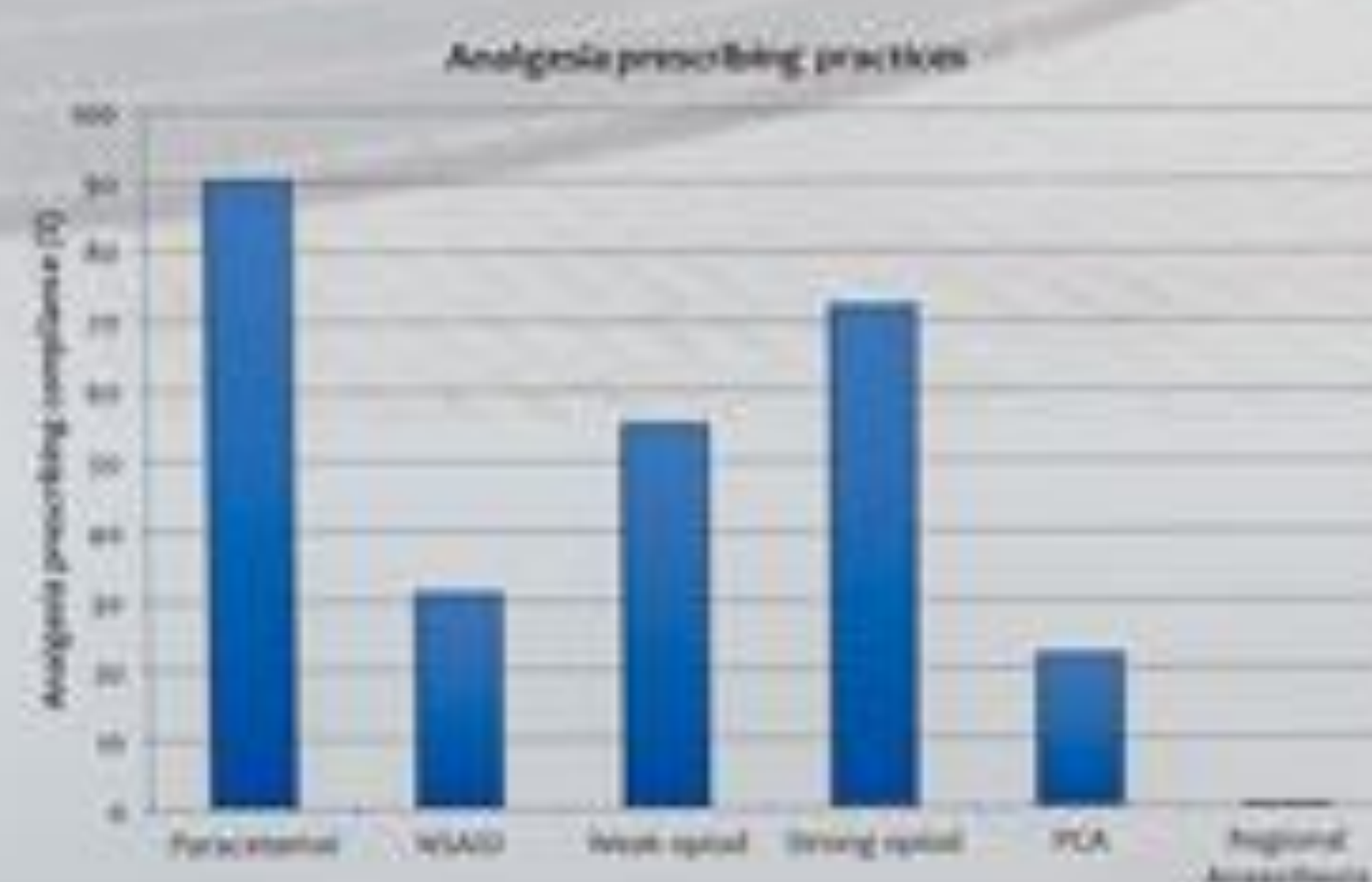
Review of Trauma Audit Research Network data (TARN) into all patients admitted to a MTC over 1 year with a diagnosis of rib fracture. Further review of 20 patients notes to identify analgesic strategies employed.

## Results

- 283 rib fracture patients admitted annually.
- 11.6% overall mortality.
- 16.9 days (Critical care 4.0) Average Length of Stay.
- Average Injury Severity Score (ISS) – 25.
- Associated Head Injury – 107 (38%) patients with 19.6% mortality, average length of stay 24.2 days. (Critical care 6.1 days), ISS 33.



- Patients referred to the Acute Pain Team – 15%.
- Poor compliance and inconsistency of analgesia prescribing.
- Limited utilisation of regional analgesia techniques.



## Conclusion

- Rib fractures in major trauma are associated with significant mortality and length of stay including critical care bed usage.
- The traditional method of managing rib fractures with epidural analgesia is complicated by often multiple associated significant injuries which may limit the use of epidural analgesia.
- There is ongoing training and accreditation for the major trauma centre ward to admit patients with epidurals and a pathway for managing patients with multiple rib fractures is being implemented.

