



# The Management of Open Ankle Fragility Fractures: A review of practice across two UK major trauma centres.

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## Introduction

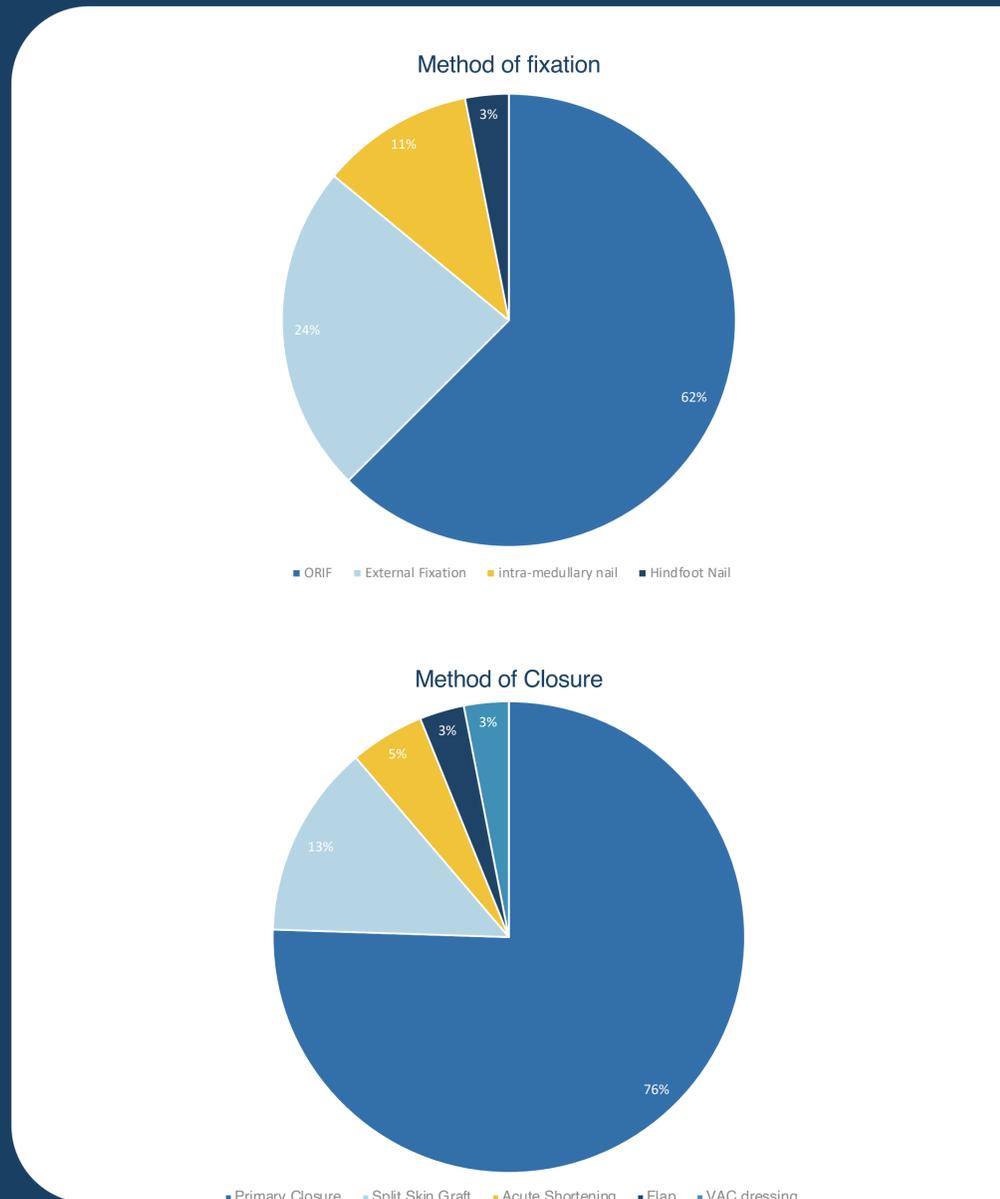
- The focus on management of fragility fractures has led to the development of established pathways with dedicated centres providing combined orthogeriatric care and optimal rehabilitation services in order to improve outcomes.
- Open ankle fragility fractures continue to receive treatment in major trauma centres as part of the UK Major Trauma Network Pathways. There are attempts at developing consensus for optimal management.
- The aim of this collaboration between two UK trauma centres is to provide an overview of current practice and outcomes to further inform the decision making process.

## Methods

- A retrospective case series of all elderly (>65yo) low energy (fragility type) isolated open ankle fractures (ISS<9) treated at both institutions over a 5 year period. Patients were identified through Trauma Audit and Research Network (TARN) and Scottish Trauma Audit Group (STAG) data. Patient records were reviewed and extensive admission related data collected.
- Mortality data was collected through Hospital Episode Statistics (HES) data. Comparative analysis was performed with National Hip Fracture Database (NHFD) data from both sites.

## Results

- A total of 64 patients (24 male) were identified. Mean age was 78.5 years old (range 66-101, SD 7.9).
- Average length of stay was 18 days (range 3-111, SD 16.4). Average time to mobilisation was 6 days (11-50).
- The proportion of patients returning to pre-injury mobility and functional status was 67.5% at an average of 140 days (SD 84).
- There were high rates of admission related complications. Mortality at 1 year was 8%.
- Data collected demonstrates comparable outcomes to NHFD data from 2021.



## Conclusion

- These injuries represent a significant proportion of workload in major trauma centres. They are associated with prolonged admissions and high complication rates, long term functional impairment and increased mortality rates at 12 months.
- Timely, combined orthoplastic surgical management aiming at single stage surgery, primary wound closure and immediate ability to bear weight is a promising approach.
- Further work is needed to determine the impact of this approach and the long term outcomes.