

Patterns of paediatric forearm fractures at a level I trauma centre in KSA

Anas Hassan

King Saud Medical City, Riyadh, KSA



Abstract

Objectives: The current literature does not clearly elaborate the pattern of paediatric forearm fractures. This study aims to identify patterns of paediatric forearm fractures in KSA.

Methods: This retrospective study was conducted in a level I trauma centre. The study population comprised patients up to 18 years of age who presented with forearm fractures between 2007 and 2015. The demographic data of the recruited patients were obtained from medical files, and fractures were identified using plain films. Mean and standard deviations were used for continuous variables, whereas frequencies and percentages were used for categorical variables.

Results: This study included 318 patients, ranging in age from 1.2 to 18 years (average: 10.42 ± 4.56 years). The majority were boys (80.8%) and 53.1% were <12 years of age. Girls were significantly more prevalent in the <12-year-old group than in the ≥12-year-old group ($p < 0.001$). A fall was the mechanism of injury in the majority of patients (82.1%) in the <12-year-old group compared with the ≥12-year-old group ($p < 0.001$). There was no statistically significant difference in fracture site between the two age groups. The distal forearm was the most common site fractured (47.8%), followed by the distal third of the forearm diaphysis (34.2%).

Conclusion: Forearm fractures are commonly seen in school-age boys. The distal radius is the most commonly fractured site reported in this study. A fall was the most common mechanism of injury, and safety measures should be implemented in places where children frequently gather.

Biography

Hassan is a senior clinical fellow in Trauma and Orthopaedics at Lister Hospital in Stevenage, his interesting in paediatric trauma helped to achieve this aspect of the research, also exploring conservative managements in orthopaedics will improve the outcome of children in terms of accepting the initial angulation of initial injury.