

https://dspace.org/

Fatal non-accidental injury in South Africa: a Gauteng hospital's perspective on the incidence and fracture types on post-mortem skeletal surveys

Wessels, Robyn Meryl

2021
https://hdl.handle.net/10539/33621

Downloaded from a DSpace repository. https://dspace.org/

FATAL NON-ACCIDENTAL INJURY IN SOUTH AFRICA: A GAUTENG HOSPITAL'S PERSPECTIVE ON THE INCIDENCE AND FRACTURE TYPES ON POST-MORTEM SKELETAL SURVEYS

Abstract:

Aims:

Determine the incidence and characteristics of fractures in suspected fatal NAI cases and calculate the incidence of fractures according to high, moderate and low specificity fracture locations for NAI.

Methods and Materials:

A retrospective review of all consecutive PMSS done between 1 January 2012 to 3 December 2018 at Charlotte Maxeke Johannesburg Academic Hospital (CMJAH) was conducted.

Results:

An analysis of 73 PMSS yielded 33/73 (45.2%) with fractures. No statistical significance in sex was found: 38 (52.1%) were male and 35 (47.9%) were female ($p > 0.05$). The mean age of those that sustained fractures was 28 months (SD: 21 months). A total of 115 fractures were sustained. The top five bones fractured were the ribs 37/115 (32.2%), parietal bone 13/115 (11.3%), ulna 13/115 (11.3%), femur 13/115 (11.3%) and radius 11/115 (9.6%). High specificity fractures locations accounted for 27.7% (40/144).

Conclusion:

The fracture types in PMSS were similar to those in live skeletal surveys. PMSS is a valuable adjunct to autopsy in detecting occult fractures of the limbs, as these are not routinely dissected. We recommend that PMSS be performed in suspected fatal NAI cases at least in children up to 24 months of age.