Etiology Of Paediatric Supracondylar Humerus Fracture A 5 Years Review

Azizi MF, Randhawa SS, Abdul Rahman NR

Orthopaedic Department, Hospital Sultan Haji Ahmad Shah, Jalan Maran, 28000, Temerloh, Pahang

INTRODUCTION:
Fracture during childhood following trauma has been the main cause of mortality, morbidity, disability and socio-economic burden. Supracondylar humeral fractures make up to 18% of all paediatric fractures and as far as 60% of paediatric elbow fractures. Causes of supracondylar humeral fractures is not well known. Aim of this study is to determine specific etiology in which this injury may occur.

MATERIALS & METHODS:
Retrospective study was conducted at our center from January 2013 to December 2017. Electronic records of patients from the age of 1 year old up to 12 years old with supracondylar humerus fractures (n=93) were reviewed to determine information about the manner in which the injury occurred.

RESULTS:
Boys accounted for 71% of the fractures. The average age of the injured children was 6 years old where the youngest child was 1 year old and oldest was 12 years old. 81 cases were found among school going age children which is 4 years and above while the other 12 were toddlers. Most of the injuries happened outdoors (71%) as summarized by the chart below. They were falls at playground (36%), falls from bicycle (23%), falls that occurred at school (15%) and falls from tree (12%).

DISCUSSIONS:
Our results show that this type of fracture occurred more often in boys compared to girls. This fracture also occurs more frequently away from home in various events and locations. Other than that we noticed that our population had accepted the practice to take a child as pillion rider while riding a motorcycle as a norm contributing to the 4 motor vehicle accident cases from our data. Unique to our semi-rural location, 8 cases were due to falls from trees which is a common outdoor activity amongst children here.

CONCLUSION:
This injury occurred most commonly in school going boys who are active outdoors and had sustained falls on an out-stretched hand. Safety precautions including educations of caretaker need to be taken to prevent this event to develop further.

REFERENCES: