

## Major Fracture Cases Treated In Green Zone?

<sup>1</sup>Abd Manaf NA, <sup>1</sup>Nur Zawani Z, <sup>1</sup>Maryam SS, <sup>1</sup>Maizatul MI, <sup>1</sup>Sohaimi SNA, <sup>1</sup>Yeop Kamal NA, <sup>1</sup>Nik Salihah MB, <sup>1</sup>Nurul Ain S MN, <sup>2</sup>Aida NS, MS <sup>3</sup>Khalid KA

<sup>1</sup>Undergraduate, Kulliyah of Medicine (KOM), International Islamic University Malaysia (IIUM), Jalan Sultan Ahmad Shah, Kuantan, 25200, Malaysia

<sup>2</sup>Emergency Physician, Department of Internal Medicine, KOM, IIUM

<sup>3</sup>Consultant Hand & Limb Surgeon, Department of Orthopaedic Traumatology & Rehabilitation, KOM, IIUM.

### INTRODUCTION:

Orthopaedic trauma conditions includes fractures, dislocation and also severe soft tissue injuries. Most cases involve include femoral and tibial shaft fractures, pelvic fractures, spine injuries, upper extremity injuries, foot and ankle injuries. The cause varies from motor vehicles accident, fall, assault and sport injury and also occupational related injury. Fractures carries morbidity and mortality, affecting patient social economic and quality of life. Thus, getting the epidemiology data especially in Green zone, Emergency Department of HTAA can help to provide further solution and delivering best services towards patient.

### METHODS:

Emergency Department of Hospital Tengku Ampuan Afzan (HTAA) was chosen to be the research place. Data was collected from March 2016 until June 2016 from registry books of green zone. The available data includes name, gender, registration number, identification number, date of admission, age, date of birth, address, diagnosis, outcome of the admission. All the data then were transferred digitally into Microsoft Excel 2013 by the researchers. After completion, all cases of fractures were analysed. No statistical analyses were used.

### RESULTS:

From March to June 2016, fractures constitutes for 3.24% of all cases presented to Green Zone, Emergency Department of HTAA. 69.0% of them are fractures of the upper limb. The most common age group involve in fracture are between 18-40 years old, 42.4%. The outcome of the cases, 66.2% were discharged, and only 25.3% were admitted. There was a significant result in which, 10 femur cases and 19 tibia cases were triage and treated in green zone and most were discharged after that.

Table 1 showing all cases of tibia and femur fracture with the outcome.

Fracture	Outcome	Freq.
Tibia (N=19)	Discharge	10
	Admit ward	6
	AOR	1
	Discharge	
	Not documented	2
Femur (N=10)	Discharge	8
	Admit ward	2

### DISCUSSIONS:

Result showed most fracture cases were discharged and treated as outpatient as it was a minor fracture. However, there were major fracture in which 10 cases of femur and 19 cases of tibia fractures that were treated in green zone. Both type of fracture have a high risk for massive blood loss or severe complication such as compartment syndrome (Taylor et al, 2012). Thus they are susceptible to deteriorate and collapsed at any time while waiting to be seen by doctors after several hours in the Green zone.

### CONCLUSION:

Some of major fractures were treated in green zone raised a major concern. Continuous medical education and training among doctors and medical staff in Emergency Department can be implement to provide better management in future.

### REFERENCES:

1. Taylor, R. M., Sullivan, M. P., & Mehta, S. (2012). Acute compartment syndrome: Obtaining diagnosis, providing treatment, and minimizing medicolegal risk. *Current reviews in musculoskeletal medicine*, 5(3), 206-213.