

## **Fragility Fractures of Lower Limbs in A Tertiary University Hospital in Malaysia**

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### **INTRODUCTION:**

Fragility fractures of lower limb, which are frequent and a major cause of morbidity and mortality in the ageing population, accounted for one-third of all fragility fractures. This study aimed to describe the incident of osteoporotic lower limb fractures among men and women at a tertiary university hospital.

### **MATERIALS & METHODS:**

A prospectively created orthopedic database was created by Fracture Liaison Services (FLS) to collect information from January 2022 to December 2022 at a tertiary university hospital in Malaysia, Hospital Canselor Tuanku Muhriz. We looked over the medical reports, first radiographs, and CT scans of patients who were 50 years of age or older. Those with severe trauma, known malignancy, and atypical fractures were excluded from the study.

### **RESULTS:**

A total of 194 patients (153 women and 41 men) were included in this study with an average age of 77.4 years. The incidence of lower limb fractures ranged from about 17.6% in the age group below 70 to about 82.4% in the over 70 age group. Most patients were Chinese (51.2%), followed by Malays (36.7%), Indians (10.6%) and others (1.5%). Fractures were found from the hip (83.2%) being the most discovered location, followed by femur (6.1%), tibia-fibula (4.1%), ankle (3.6%) and others such as patella and periprosthetic (3%). 73.7% of patients were initiated with anti-osteoporotic medications, while 92.8% were on calcium and Vitamin D supplements.

### **CONCLUSION:**

Ageing increased the risk of osteoporotic lower limb fractures. The hip was the site of most fractures. FLS is a secondary fracture prevention service that assesses and enhances patient's bone health to stop future fragility fractures. It is important to be aware of health initiatives that encourage the consumption of calcium and vitamin D, early osteoporosis diagnosis, bone loss prevention, and maintaining a healthy body weight especially in women.

### **REFERENCES:**

1. Kaye JA, Jick H. Epidemiology of lower limb fractures in general practice in the United Kingdom. *Injury Prevention* 2004; 10:368-374.