

ABSTRACT

A descriptive cross sectional study was carried out during the three month period 14th August to 14th November 2007, among patients with limb fractures admitted to Teaching Hospital, Karapitiya (THK).

Some selected characteristics and associated factors of patients with limb fractures admitted to THK were studied. An interviewer administered questionnaire and data extraction form were used as study instruments.

Among all admissions (9749) during the study period 6% (581) were patients with fractures. Out of all fractures 86.5% (505) were limb fractures. 16.2% of patients with limb fractures were children in pediatric age group (≤ 12 years). 61% of patients were males with a male to female ratio 1.5: 1. A statistically significant association ($p < 0.001$) was observed between age and sex in those over 12 years of age.

67% of patients admitted to THK following limb fractures were married. 95.2% of patients were Sinhalese and 87.1% were from the Galle district. Approximately one third of patients were in the total monthly family income group of Rs.5,000 to 10,000. 24% of patients or care givers of children were unskilled labourers while 37% were in the social class Va.

The majority of patients (54.2%) had upper limb fractures. The radius was the commonest bone (62%) to be fractured in the upper limb and the distal end was the commonest site (74.7%) in radial fractures. Out of all fractures 44.2% were lower limb fractures. Tibia and femur fractures accounted for 38.8% and 37.9% of lower limb fractures respectively. The proximal end was the commonest site to be fractured in the femur 68.2%. In tibia shaft and distal end fractures showed near similar percentages.(37.9% , 36.8% respectively).

Single fractures were commoner than multiple fractures both in upper and lower limbs. A statistically significant association ($P < 0.001$) was observed between age and single upper limb fractures and also with age and single lower limb fractures. Simple fractures were commoner than multiple fractures both in the upper and lower limbs. A statistically significant association ($P < 0.001$) was observed between age and simple upper limb fractures as well as between age and simple lower limb fractures. Closed fractures were commoner than open fractures both in upper and lower limbs and statistically significant

association ($P < 0.001$) was observed between age and closed upper limb fractures and also between age and closed lower limb fractures.

42.2% of accidents which caused limb fractures occurred at home and 40.4% occurred on road and they were identified as common places of occurrence of limb fractures. The majority of females (67.7%) experienced limb fractures at home and males (50.2%) on road. A statistically significant association ($P < 0.001$) was observed between place of occurrence and sex.

Home accidents accounted for 34.5% of limb fractures and Road Traffic Accidents (RTAs) accounted for 30.7% of limb fractures and they were identified as common types of accidents. ≤ 12 years age patients showed a higher percentage of limb fractures following home accidents (44.5%) while more than 12 years of age showed near similar percentage of limb fractures following RTAs (33.8%) and home accidents (31.9%). A Statistically significant association ($P < 0.001$) was observed between type of accident and age. Home accidents were identified as common cause of limb fractures in females (60.6%) and for males it was RTAs (42%). A statistically significant association was observed between type of accident and sex ($P < 0.001$).

Slipping and falling was identified as the most common type of home accidents over 12 years of age (72.6%) while fall from a height was the commonest (51.3%) in those over 12 years. A statically significant association ($p < 0.001$) was found between age and type of accident.

The motorcycle was the commonest type of vehicle (52.3%) that caused RTAs in patients with limb fractures. Driver was the victim in 58.7% of RTAs. Only 13.5% of patients with limb fractures subjected to RTA were under the influence of alcohol.

Out of patients admitted to THK following RTAs 90% had sought allopathic treatment as their first choice. 32% of patients had chosen traditional / aurvedic treatment as first choice of treatment believing that it was the best. 48% of patients had chosen it as it was the closest method of treatment for them. A statistically significant association was observed between type of treatment and reason for selecting it.

The majority of patients had taken 1 – 12 hours to reach the first treatment method. Most of the patients admitted to THK following limb fractures were from 21 – 50 km distance from THK and 49.6% patients had reached THK within 1 -2 hours.