Research Article

Prevalence of fracture shaft of femur and outcome: A hospital based study

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Abstract

Background: The epidemiology of fracture shaft of femur is less well studied than that of hip (Femur neck and Intertrochanteric) fractures. Fracture shaft of femur occurs much less frequently than the fractures of proximal femur which are associated with falls and osteoporosis. Fracture shaft of femur is often linked with severe trauma in the younger group of patients. However, earlier studies have reported that the incidence of fracture shaft of femur increases with age. **Objective:** The present study was done to describe the prevalence of Fracture shaft of femur and its outcome at orthopaedics inpatient department of a tertiary care hospital. **Methods:** The present clinical study was carried out at orthopaedics department of our tertiary care hospital. Study duration was from Jan 2013 to Dec 2013. Total patients admitted in the orthopaedics ward during the study period were analyzed. Prevalence of Fracture shaft of femur was assessed. Age and sex distribution of the patients and the outcome at orthopaedics inpatient department of a tertiary care hospital was described. **Results:** Total 2161 patients were admitted at the orthopaedics ward during the study period. Prevalence of Fracture shaft of femur was 12.6% with a total of 272 patients out of 2161 patients. Most of the patients were between 20 - 40 years of age. The average age of study group was 39.7 years. There was a predominance of males with a proportion of 56.25 percent i.e. 153 patients were males out of 272 patients. Outcome was good with most of the patients being discharged with either improvement or recovery from clinical symptoms. There was one patient who took discharge against medical advice and one patient died i.e. mortality of 0.37%.
Keywords: Fracture shaft of femur, epidemiology.

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INTRODUCTION

The epidemiology of fracture shaft of femur is less well studied than that of hip (Femur neck and Intertrochanteric) fractures. Fracture shaft of femur occurs much less frequently than the fractures of proximal femur which are associated with falls and osteoporosis[1]. Fracture shaft of femur is often linked with severe trauma in the younger group of patients. However, earlier studies have reported that the incidence of fracture shaft of femur increases with age[2,3]. The present study was done to describe the prevalence of Fracture shaft of femur and its outcome at orthopaedics inpatient department of a tertiary care hospital.

METHODS

The present clinical study was carried out at orthopaedics department of our tertiary care hospital. Study duration was from Jan 2013 to Dec 2013. Total patients admitted in the orthopaedics ward during the study period were analyzed. Prevalence of Fracture shaft of femur was assessed. Age and sex distribution of the patients and the outcome at orthopaedics inpatient department of a tertiary care hospital was described.

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RESULTS

Table 1: Age Distribution of Cases

Age (years)	Number of patients	Percentage
Less than 20	4	01.47
20-30	93	34.19
31-40	69	25.37
41-50	41	15.07
51-60	30	11.03
61-70	19	6.99
71-80	14	5.15
81-90	2	0.74
Total	**272**	**100**

Table 2: Sex Distribution of Cases

Sex	Number of patients	Percentage
Male	153	56.25
Female	119	43.75
Total	**272**	**100**

Total 2161 patients were admitted at the orthopaedics ward during the study period. Prevalence of Fracture shaft of femur was 12.6% with a total of 272 patients out of 2161 patients. Most of the patients were between 20 - 40 years of age. The average age of study group was 39.7 years. There was a predominance of males with a proportion of 56.25 percent i.e. 153 patients were males out of 272 patients. Outcome was good with most of the patients being discharged with either improvement or recovery from clinical symptoms. There was one patient who took discharge against medical advice and one patient died i.e. mortality of 0.37%.

DISCUSSION

Femoral shaft fractures are common injuries in trauma patients with significant morbidity. The severity varies from low-energy injury, which is more common in children and the elderly, to high-energy injury, which is more frequently seen in the younger population. Literature on epidemiology of patients with femoral shaft fractures is un-known[4]. In our study, most of the patients were between 20 - 40 years of age. The average age of study group was 39.7 years. There was a predominance of males with a proportion of 56.25 percent i.e. 153 patients were males out of 272 patients. Study by Arneson *et al* [5] has mentioned that the incidence of femoral fractures due to severe trauma was greatest in young patients, especially for diaphyseal fractures and showed a male excess. Study by NG, A. C. *et al*[6] also mentioned that among men, subtrochanteric, diaphyseal, and distal femur fractures were all more likely to be attributed to severe, high-energy trauma, but this was true only for diaphyseal femur fractures among women. Women were also more apt to experience a subtrochanteric or distal femur fracture than one of the femur shaft, and the etiology was more often a fall. Limitation of our study was that it is a hospital based study so that we cannot get the population prevalence estimate from the study population. However, it has attempted to describe the prevalence in the hospital setting and give an insight into the age and sex distribution and outcome in the study population.

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