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Research Article

Study of HIP Fracture and its Associated Factors in Hospitalized Patients in Shahid Beheshte Hospital of Yasouj. During 2014.

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ABSTRACT:

Introduction: Hip fracture, is the most common causes of death from trauma, especially after age 60 that most can be seen in women and numerous complications can leave the way they live. The purpose of this study is survay of hip fractures and determining its related factors in the region according to its specific conditions.

Methods: This study was a descriptive cross-sectional, which has been done, data collected from patiants monitoring were analyzed. All patients over 60 years in the year 2004 , that were hospital admission martyr Beheshti hospital of Yasuj and were consisted inform with the company with study , questionnaire were filled for them.

Results: In this study, 224 individuals diagnosed with hip fracture were studied. The mean and SD age of patients was: 71.6, 11.2. The average and SD time of people staing in hospital was: 4.7, 0.75, and 29 percent of them were female, 71 percent were male. Risk of environmental factors was 43 percent in hip fracture. 89 percent have muscular atrophy, 43 percent have low mobility, 7 percent have diabet, 18 percent have been forgotten and 36 percent have osteoporosis.

Conclusion: More of patients with hip fractures in the study area were male invers of other study. They have more age, more muscular atrophy and less osteoporosis compared to similar studies. Environmental risks in this study were lower than other studies and this is due to specific climatic and conditions of the province.

Keywords: fracture, hip, Epidemiology Yasuj.

INTRODUCTION:

Hip fracture is one of the most common causes of death from shock, especially after age 65, which is often seen in women. And can have many complications on their lifestyle. In many studies, the effects of factors such as age, sex, history of fracture, osteoporosis, milk consumption, muscle atrophy, life-threatening conditions, body mass index, neurological diseases, diabetes, history of

hip fracture, smoking, use of anticonvulsants and depression, Cardiovascular diseases, low mobility and activity, history of disability, perceived weakness, menopause age, visual impairment, and the use of external hip proteins in hip fractures are estimated (1-7).

Pelvic fracture (hip) is a serious and dangerous complication of osteoporosis, which is known as a major health problem. This problem accounts for 20% of the beds in the orthopedic ward in most countries of the world, and it puts a lot of costs on societies (Valizadeh, 2007) (8)

Hip fractures include irreversible injuries, which often occur at an advanced age and cause severe complications in the rest of the patient's life span. In a descriptive study, 41 patients were randomly selected using prospective random sampling. Of these, 23 were male and 18 were females, with a mean age of 58.3 and 62.6, respectively. The treatments included 30 surgical procedures, 5 skeletal elasticities and 6 supportive treatments such as rest, skin tension and physiotherapy. (5).

In study of niktab (2001), out of a total of 490 hip fractures, 337 cases of fractures were attributable to osteoporosis and disproportionate to trauma. Among the fractures attributable to osteoporosis, 69.67% of fractures occurred in men and 41.42% of fractures occurred in women, most of whom were residents of the city. (61.1%) had the maximum frequency of fractures in the age group of 70-79 and the mean fracture length was 71.22.

Which was in men 71.34 and in women was 71.09. 58.8% of the fractures occurred due to simple falling or fall from the stairs. 27% of fractures occurred in winter, but there was no significant difference between the seasons in terms of fracture season. The average length of stay in the hospital was 8.12 days. Of the 337 fractures attributable to osteoporosis, the mortality rate in the hospital was 4.45%. Unlike many hip fracture reports in the world, according to which fracture is more prevalent in women, in this study, fracture in all age groups was more common in men than men (1).

In Moaeri (2007) study on the epidemiology of hip fracture in Iran, 50% of fractures occurred before 70 years of age. The fact that osteoporotic fractures are more prevalent in men (8) suggests the need for early intervention to prevent osteoporosis, especially in men, and requires further investigation. In the Kohgiluyeh and Boyer Ahmad province, no study has ever been done regarding the extent and distribution of the cause and the causes of hip fracture. The aim of this study was to investigate the epidemiology of hip fracture and determine some factors affecting it in the region with respect to its specific conditions.

MATERIAL AND METHODS:

This study was descriptive and analytic and was carried out in a longitudinal manner over a period of 12 months. The collected data were analyzed after the monitoring. The required information was collected by a researcher-made questionnaire and collected for all patients with hip fracture diagnosis and with the help of colleagues in the clinic and in the operating rooms of Shahid Beheshti Hospital in Yasuj during 2014. The target population of all elderly patients over 60 years old included all patients with hip fractures referring to the emergency department of Yasuj Shahid Beheshti Hospital, who participant if they accept after given consent inform. The data gathering tool was a researcher-made questionnaire that was prepared for this purpose and its effectiveness was reviewed and approved by the experts. By the end of the year, data on 224 hip fractures that had been referred to one of the Emergency Centers or Yamarestan were collected. Data were analyzed using SPSS software. To describe the data, central indicators and dispersion indicators, as well as frequency distribution tables and charts were used. Ethical considerations, including the principles of confidentiality of information collected, will be fully respected and, according to this study, no additional costs or suffering would be imposed on patients.

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of 12 months. The collected data were analyzed after the monitoring. The required information was collected by a researcher-made questionnaire and collected for all patients with hip fracture diagnosis and with the help of colleagues in the clinic and in the operating rooms of Shahid Beheshti Hospital in Yasuj during 2014. The target population of all elderly patients over 60 years old included all patients with hip fractures referring to the emergency department of Yasuj Shahid Beheshti Hospital, who were given consent if they were satisfied.

FINDINGS:

Out of 224 cases of hip fracture, 64 (28.6%) were female, 208 (92.9%) were married. Out of the 224 subjects, 72 (32%) were due to falling, 25 (11%) were injured due to an accident, and the rest for hip fractures due to miscellaneous causes. 200 (89.2%) had atrophic symptoms. The mobility rate of the majority of patients was 97 (43%) moderate. 52 (23%) used nerve agents.64 (28.6%) were depressed and 16 (7.1%) had moderate and severe amnesia. 32 (14.3%) had type 2 diabetes. 102 people (46%) used anti-fat medicines. 80 (36%) had osteoporosis. The mean hospitalization time was 4.7, the median 4, the standard deviation was 0.75, the maximum 3, and the minimum hospitalization time was 7 days. 160 patients (71.5%) were over 70 years old with a mean age of 71.6 and standard deviation of 11.3 and a minimum and maximum age of 60 and 90 years.

Table 1. Distribution of patients with hip fracture, according to the recommended treatment in the year 2014.

Tratment	Number	Percent
FNF	32	14.2
DHS	144	64.3
AP	48	21.4
Total	224	100

Table 2. Distribution of patients with hip fracture admitted in Yasuj Shahid Beheshti Hospital in terms of location of fracture

Location of fracture	Number	Percent
Femoral neck	80	35.7
Trochouter	144	64.3
Total	224	100

Table 3: Comparison of hip fracture rate in sex during 2014

Sex	Number(Percent)	Z Test*
Femal	64 (28.6)	Z= 3.96 P= 0.014
Male	160(71.4%)	
Total	224(100%)	

*The rate of hip fracture in men was significantly higher. While in most studies, this ratio is equal or higher in women.

Table 4: Comparison of the age of the patients with hip fracture, by sex over the course of the year

Sex	Mean(SD)	T Test*
Femal	77.4(11.6)	T= 3.76
Male	69.3(10.6)	DF= 222
Total	71.6(11.2)	P=0.011

*The rate of hip fracture in men was significantly higher. While in most studies, this ratio is equal or higher in women.

DISCUSSION AND CONCLUSION:

In the present study, hip fracture was the most common in men, while in the good study. Associates of Kerman in 2001 and Azar in 1375, the ratio of women with hip fractures was higher than men, only in the study of Valizadeh (2007), the ratio of women and men with hip fractures was not significantly different (1, 3 and 7). The causes of these specific conditions and social structure, Economic and cultural area of Kohgiluyeh and Boyer Ahmad province. In the present study, life-threatening factors were 32% related to falling and 11% were related to accidents and in total 43%, while in similar studies, the dangers of living environment were much higher (2-3, 8).

The rate of muscle atrophy in the patients studied in this study was 89%, while this rate was 81% in the barbaric study (2001). Also, the level of muscle atrophy was lower in other studies (4-8). Of course, it should be noted that the mean age of our patients was significantly higher than all other studies. Mobility and low activity are among the problems of the elderly and are factors that cause muscle atrophy and osteoporosis, and ultimately are the causes of hip fractures. This rate in our study has been much better in similar studies, and our patients Mobility has been good). In the

present study, osteoporosis was 36% less than that in similar studies (1, 3). The mean and standard deviation of the length of hospitalization time of patients with hip fracture in Yasuj Shahid Beheshti Hospital was 4.7 ± 0.75, which was not significantly different from the results of similar studies in the country (1 and 5-8). In our study, most patients (86%) were over the age of 65 years. The mean and standard deviation of hospitalized patients with hip dissonance was 71.6 ± 11.2 years, which is similar to other studies (1, 2-6). The age of women was significantly higher than that of men, while in most studies similar, this difference was not significant. The reason for this can be the demographic and cultural structure of Kohgiluyeh and Boyer Ahmed province. In general, it can be concluded that patients with hip fractures in the studied region were older than age. With more muscular atrophy and less osteoporosis than other studies. It has been less exposed to the dangers of life than other studies. And this has been due to the specific climatic conditions of the province.

STUDY LIMITATIONS:

The inability to test osteoporosis was one of the main problems of the project, which was not performed due to the lack of available facilities.

SUGGESTIONS:

It is suggested that other studies in this field should not be used only to assess the illnesses and problems of patients, but diagnostic tests should be performed for them. In this study, osteoporosis data was only reported in those previously diagnosed with the tests, while a large percentage of the remaining patients may have osteoporosis but were not diagnosed due to lack of testing.

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