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EVALUATION OF FUNCTIONAL OUTCOME OF HIP FRACTURE SURGERY IN ELDER PATIENTS

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Abstract:

Objective: *To evaluate functional outcome in elderly patients aged 50 years and above with hip fracture who were managed with hip surgery.*

Study Design: *An Observational study*

Place and Duration: *The study was conducted in the Orthopedic Department Unit I of Sheikh Zayed Hospital Rahim Yar Khan for the period of 1 year from April 2016 to April 2017.*

Materials and Methods: *A total of 82 patients were included in the study. The Variables used in the evaluation of the functional outcome; Condition before fracture, after fracture condition (independent walker, assisted walking, bedridden). Twenty-two patients from 82 patients were excluded from the study and 3 patients were excluded from follow-up due to the death of 22 patients within one year.*

Results: *57 patients; 36 (63.2%) were male and 21 (36.8%) were female. There were 10 patients with intracapsular fracture and 47 patients with extra capsular fracture. Before the operation, 57 patients were free of any device (preoperative score 9), but one year later, the subsequent mobility score was 6.93. In our study, the intracapsular and extracapsular fracture did not differ significantly in terms of functional outcome, which may be due to small sample size.*

Conclusion: *The fracture of the proximal femur in an elderly population is a serious orthopedic injury. The circumference of this skeletal trauma is extremely complicated and impossible to control. The management of this injury goes into the fields of medicine, rehabilitation, psychiatry, social systems, medical economy, and there may be some unknown factors.*

Key Words: *Hip fracture, fracture, elderly*

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INTRODUCTION:

Because of the aging of the population, the incidence of hip fracture is increasing. It is estimated that the annual global number of hip fractures will increase from 1.7 million in 1990 to 6.3 million in 2050. Most hip fractures are associated with increased mortality and morbidity, often leading to costly hospitalizations and long procedure. Rehabilitation The vast majority of patients do not have access to pre-fracture survival and full functional recovery2. Our approach was proximal femur fracture in the elderly population. Proximal femur fracture is one of the most common and potentially devastating injuries with significant morbidity and mortality in the elderly population. This study was carried out to evaluate the functional and functional outcomes remotely in elderly patients who had proximal femur fractures and underwent surgery.

MATERIALS AND METHODS:

From April 2016 to April 2017, we prospectively recorded all patients with proximal femur fractures in the orthopedic department of Sheikh Zayed Hospital Rahim Yar Khan. The criteria for the selection of patients was 52 out of both sexes. There were patients with isolated trochanteric fractures, suspicious pathologic fractures and other associated lesions outside the study, and patients with anterior ipsilateral or contralateral proximal femur fracture. After the patient selection, the page produced by the computer during admission (Annex-1). The leaf of Ek consists of two parts. Part of the questionnaire consists mainly of patient data such as age, gender, occupation, residence, contact number and any addiction history. Part B of the questionnaire includes type of fracture, type of fracture, date of injury, type of injury, date of operation, type of treatment, internal fixation or prosthetic replacement and pre-fracture lifestyle. (alone or with one). The operation was evaluated according to the American Society of Anesthesiologists (ASA) classification. Preoperative and postoperative locomotor capacities of patients were assessed and Parker and Palmer's mobility score was recorded. Functional capacity was studied with patients who could walk in the house, get out of the house, go shopping with the patients, go to the restaurant, visit the family. These tasks were assessed using a four-level system: level 1 = independent management, level 2 = management with a single help device, level 3 = management with the help of another person, and level 4 = not all processed. The patient's functional capacity and residence were examined preoperatively and recorded postoperatively for two weeks, six weeks, six months, and one year. Statistical analyzes were done by test, binary t-test and chi-square test.

RESULTS:

Between April 2015 and April 2016, 82 patients were treated due to proximal femur fracture at Holy Family Hospital, Rawalpindi. Twenty-two patients from 82 patients were excluded from the study and 3 patients were excluded from follow-up due to the death of 22 patients within one year. 57 patients; 36 (63.2%) were male and 21 (36.8%) were female. There were 10 patients with intracapsular fracture and 47 patients with extra capsular fracture. Fifty-seven patients before the operation were free of any device (preoperative score 9), but one year later, the subsequent mobility score was 6.93, as shown in table 2. None were limited to patients. bed before breakage. The functional capacity of the patients did not return to the levels before fracture. The total functional capacity of the living patients was 6.9 (with a significant p-value of 0.00) as seen in Table 2.

Table 1: Male and Female Ratio

Male (n-36)	Female (n-21)	P value	95% confidenceinterval of the difference
7.72 Std Dev. 1.64	5.57 Std Dev 2.5	0.00	1.03-3.26

Table 2: Pre-Operative and Post-Operative Status. Paired Sample Statistics

Pre-Operative score (mean)	Post-operative score (mean)	Mean Difference	P value	95% confidenceinterval of the Difference
9.00	6.93	2.07 Std de 2.259	0.00	1.4-2.6

There was a significant difference in functional capacity between males and females before fracture. The functional capacity of males was 7.72 and females were 5.57. This was a significant difference (P value).

Table 3: Post Operative Mobility Score between younger and older age group. (Younger age b/w 52-65 years & older age 66 and above).

Younger Age (n-35)	Older Age (n-22)	Mean Difference	P Value 95% confidenceinterval of the Difference
7.77 St dev 1.68	5.59 St dev 2.44	2.18	0.00(1.08-3.2)

Table 4: Intracapsular & Extracapsular Fracture

Intracapsular Fracture (n-10)	Extracapsular Fracture (n-47)	Mean Difference	P Value	95% Confidence Interval of the Difference
6.8 Std dev 1.932	6.9 Std dev 2.340	-0.15	0.84	-1.74-1.433

As shown in Table 1, women show that they need more help than men. The increase in age was associated with worse functional recovery, worse walking condition, and postoperative postoperative complication rate. for hip fracture treatment. As a result, there was a significant difference between the functional capacity of the youngest age group (ages 52-65) and the age group (aged 66 and over), p. no. 3. In our study, there were no significant differences in the functional outcomes of intracapsular and extracapsular fractures, depending on the small sample size shown in Table 4.

DISCUSSION:

Proximal femur fracture is a destructive injury due to significant morbidity and mortality problems. The frequency of comorbid medical and surgical conditions commonly seen in this geriatric population causes patients to continue.
complex. A multidisciplinary approach to these fractures has been justified.

Major hip fracture Type of fracture and management. (Orthopedic equipment). Pre-operative optimization (Medicine and anesthesia). Postoperative rehabilitation (Treatment). Post-surgery social network. (Family and others).

If a predicted functional outcome is expected, each member should play an aggressive role. There are many factors affecting healing after hip fracture: pre-fracture health, mental and functional status, good limb muscle strength, 4 types of surgery, fracture type, surgical complication, self-efficacy beliefs, depressive symptoms, amount of medication, hip pain, urinary incontinence and chronic diseases6. The main objective of this multidisciplinary management is to restore the functional capacities of these patients to the level they had before they were broken. The one-year mortality rate after hip fracture is high. In previous Finnish studies this rate ranged from 18% to 28%. The lowest mortality rate was 6.2% in the literature review. Cedar and colleagues reported the next low death rate as 12%. And the highest mortality rate was reported by Beals 10 as 50%. In this study, 28.8% of patients die within a year of a fracture. It is difficult to compare the mortality rates of different studies, especially from different countries because background variables differ according to the patient's age, gender and health status, gait ability, daily life activity and care status. postoperative and postoperative rehabilitation. Hip fracture is usually associated with a higher mortality rate than males in females11. However, there were no significant differences in this subject in this study. Several studies have found that healing after hip fracture is usually complete within 6 months. In our study one year later, the functional outcomes of our patients were generally poor when compared to the pre-fracture condition. None of the patients returned to the levels before fracture. Age progression was associated with higher mortality after hip fracture. In this study, the extreme age group is associated with a higher mortality rate and decreased functional capacity. In the Barnes study, female and male participants had a high ratio of 7: 1, and in other studies a ratio of 2.4 to 4.0 to 1.0 was reported for women. It is perhaps more likely that osteoporosis is caused by women having more hip fractures than men. Although there is no significant difference between men and women in our study, between males and females functional capacities, males need more help than men for rehabilitation. # one.

CONCLUSION

It is important to recognize the nature of the injury, the possible effect of the patient at the functioning level, and the secondary effect on the patient's relatives. The main purpose of the practice is to return the patient to his level before he is injured. For most patients, this goal is achieved with the best surgical treatment, followed by early mobilization. However, a satisfactory outcome depends on much more than a fracture operation. The physician must

recognize complex problems with the geriatric population and develop treatment plans that address all the factors that may be affected. It is possible that a new and better treatment for osteoporosis will cause a reduction in the incidence of hip fracture in the future. For now, however, we have to address the hip fracture epidemic on an individual and collective level.

REFERENCES:

1. Coburn, M., Sanders, R.D., Maze, M., Nguyên-Pascal, M.L., Rex, S., Garrigues, B., Carbonell, J.A., Garcia-Perez, M.L., Stevanovic, A., Kienbaum, P. and Neukirchen, M., 2018. The hip fracture surgery in elderly patients (HIPELD) study to evaluate xenon anaesthesia for the prevention of postoperative delirium: a multicentre, randomized clinical trial. *British journal of anaesthesia*, *120*(1), pp.127-137.
2. Oberai, T., Laver, K., Crotty, M., Killington, M. and Jaarsma, R., 2018. Effectiveness of multicomponent interventions on incidence of delirium in hospitalized older patients with hip fracture: a systematic review. *International psychogeriatrics*, pp.1-12.
3. Alexiou, K.I., Roushias, A., Varitimidis, S.E. and Malizos, K.N., 2018. Quality of life and psychological consequences in elderly patients after a hip fracture: a review. *Clinical interventions in aging*, *13*, p.143.
4. Olofsson, B., Persson, M., Bellelli, G., Morandi, A., Gustafson, Y. and Stenvall, M., 2018. Development of dementia in patients with femoral neck fracture who experience postoperative delirium—A three- year follow- up study. *International journal of geriatric psychiatry*.
5. Tulic, G., Dubljanin-Raspopovic, E., Tomanovic-Vujadinovic, S., Sopta, J., Todorovic, A. and Manojlovic, R., 2018. Prolonged pre-operative hospital stay as a predictive factor for early outcomes and mortality after geriatric hip fracture surgery: a single institution open prospective cohort study. *International orthopaedics*, *42*(1), pp.25-31.
6. Rai, S.K., Varma, R. and Wani, S.S., 2018. Does time of surgery and complication have any correlation in the management of hip fracture in elderly and can early surgery affect the outcome?. *European Journal of Orthopaedic Surgery & Traumatology*, *28*(2), pp.277-282.
7. Hulsbæk, S., Larsen, R.F., Rosthøj, S. and Kristensen, M.T., 2018. The Barthel Index and the Cumulated Ambulation Score are superior to the de Morton Mobility Index for the early assessment of outcome in patients with a hip fracture admitted to an acute geriatric ward. *Disability and rehabilitation*, pp.1-9.
8. Morri, M., Forni, C., Marchioni, M., Bonetti, E., Marseglia, F. and Cotti, A., 2018. Which factors are independent predictors of early recovery of mobility in the older adults' population after hip fracture? A cohort prognostic study. *Archives of orthopaedic and trauma surgery*, *138*(1), pp.35-41.
9. Hershkovitz A, Angel C, Brill S, Nissan R. The Association between Anticholinergic Drug Use and Rehabilitation Outcome in Post-Acute Hip Fractured Patients: A Retrospective Cohort Study. Drugs & aging. 2018 Apr 1;35(4):333-41.
10. Boylan, M.R., Riesgo, A.M., Paulino, C.B., Slover, J.D., Zuckerman, J.D. and Egol, K.A., 2018. Mortality Following Periprosthetic Proximal Femoral Fractures Versus Native Hip Fractures. *JBJS*, *100*(7), pp.578-585.
11. McIsaac, D.I., Wijeysundera, D.N., Huang, A., Bryson, G.L. and van Walraven, C., 2018. Association of Hospital-level Neuraxial Anesthesia Use for Hip Fracture Surgery with OutcomesA Population-based Cohort Study. *Anesthesiology: The Journal of the American Society of Anesthesiologists*, *128*(3), pp.480-491.
12. Stone, A.V., Jinnah, A., Wells, B.J., Atkinson, H., Miller, A.N., Futrell, W.M., Lenoir, K. and Emory, C.L., 2018. Nutritional markers may identify patients with greater risk of re-admission after geriatric hip fractures. *International orthopaedics*, *42*(2), pp.231-238.
13. McLynn RP, Ottesen TD, Ondeck NT, Cui JJ, Rubin LE, Grauer JN. The Rothman Index is associated with postdischarge adverse events after hip fracture surgery in geriatric patients. Clinical Orthopaedics and Related Research®. 2018 May 1;476(5):997-1006.
14. Kim, Y.T., Yoo, J.H., Kim, M.K., Kim, S. and Hwang, J., 2018. Dual mobility hip arthroplasty provides better outcomes compared to hemiarthroplasty for displaced femoral neck fractures: a retrospective comparative clinical study. *International orthopaedics*, pp.1-6.
15. Bettelli G. Preoperative evaluation of the elderly surgical patient and anesthesia challenges in the XXI century. Aging clinical and experimental research. 2018 Mar 1;30(3):229-35.