

## **129. FRACTURES OF THE METACARPAL BONES, CLASSIFICATION, DIAGNOSIS, TREATMENT**

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**Introduction.** Fractures of the Mt (Mt) bones present a range of 19% - 35% of the osteoarticular system trauma. 88 % fracture of Mt fractures are the rays 2-3-4-5, and the fifth Mt bone have up to 10% of hand bone fractures.

**Aim of the study.** To evaluate the intermediate term results (follow up of two years) of distal humerus fractures according to data from medical records, classification, type of implant used in fracture fixation, specific parameters of elbow postsurgical treatment.

**Materials and methods.** We have proposed a study of patients with fractures of the Mt bones which consecutively was treated in department of Hand Surgery with the application of microsurgical techniques, of Traumatology and Orthopedics Clinical Hospital, Chisinau in the period 2018-2019. Final outcomes was determined by using Disabilities of Arm and Shoulder and Hand (DASH) score and the wrist MAYO score calculated along with complete range of motion. All results were presented as mean  $\pm$  standard deviation ( $\pm$ SD).

**Results.** First Mt fracture was in – 10 cases (5 cases - shaft fracture; Rolando/Bennett fractures -5 cases), fracture of 2 or more rays 10 cases, and rest cases were one ray Mt bone fracture - 115 cases, where 75(55,5%) patients has been with subcapital fractures of fifth Mt bone, and in total were investigate 135 patients. The average age is 30,05 years (max 67, min 15 SD  $\pm$ 10,45) The report between sex was 8,4:1 (121:14) with predominance of male gender. In fresh and less comminuted fractures cases was achieved close reduction of Mt and fixation was obtained with k-wires in 56 (41,8%) cases.. In rest patients were apply open reduction and internal fixation with the k-wires by segment fracture of Mt subcapital fracture - 43(31,85%) patients, shaft segment 30 (22,22%) patients, and 10 (7,41%) with fracture of the base of Mt. All fractures healed, and radiographic union was observed at an average of 1,5-3 months. Was possible to investigate MAYO and DASH scores at 19 patients with a mean of 88 $\pm$ 19 and 19 $\pm$ 20.

**Conclusions.** Outcome of open reduction and internal fixation of fractures of the Mt bones usually can result in high union rates, and a good result can be obtained with perfect reduction of the Mt fragments fracture and it is desired as soon is possible for an acceptable outcome DASH and MAYO scores.

**Key words:** Mt bone, fracture fixation, k-wires

## **130. CALCANEUS FRACTURES**

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