## MANAGEMENT OF DISTAL HUMERUS FRACTURES WITH ILIZAROV

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## **ABSTRACT**

**Background:** Distal humerus fractures either open or closed or intra-articular, full functional recovery is difficult to obtain. The treatment options are available: minimal internal fixation, open reduction-internal fixation, and external fixation.

**Objective:** To evaluate the functional outcome and union time in distal humerus fracture treated with Ilizarov.

**Methodology:** This prospective Qausi-experimental study was carried out from April 2016 to March 2019. Total 14 patients were included with a mean age of 40 years (range 30–55) with distal humerus fractures either closed and open with supra and intercondylar, were stabilized with an Ilizarov method. Functional outcome and bone union was assessed by ASAMI criteria. Patients were followed up to 15-18 months. SPSS-21.0 was used to calculate the descriptive statistics.

**Results:** According to Gustilo classification for open fractures, there were Grade IIIA 09(64.28%). According to AO classification for closed fractures, A type fractures were 3(21.42%), C type 2(14.28%). Based on ASAMI criteria for bone assessment; excellent results in 3(21.42%), good results in 7(50%) and fair results in 4(28.57%) and functional outcome was 5(35.71%) excellent, 8(57.14%) good and 2(14.28%) fair was obtained. Union was achieved in all 14 cases and Ilizarov was taken out in a mean period of 4.3 (3-6) months. This result was expected as an average time of union was 14.83.

**Conclusion:** Ilizarov is an effective method for the stabilization of distal humerus fractures and can be preferred an alternative treatment method because this method allows close reduction without extensive soft tissue damage and also permits early elbow movements for the comminuted intra-articular distal humerus fractures.

**Keywords:** Humerus fractures; Distal; Ilizarov external fixator