**Fracture fixation of distal part of the radius: A comparative study of different methods**

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**Abstract**

**Background:** A variety of treatment modalities are available for fracture of distal radius. However, there is a lack of consensus on the preferred treatment in these cases.

**Objective:** To compare the different methods for the treatment fracture of distal part of the radius based on the outcome at the end of treatment.

**Methods:** Analysis of cases with fracture of distal radius treated at our centre over a period of seven years. A total of 301 patients were included in the study and end of treatment outcome was compared based on clinical appearance of the wrist at discharge, restoration of normal movements of the wrist joint and resumption of normal activities.

**Results:** Of the total number of cases admitted for fracture distal radius, nearly 75% cases were operated on using Percutaneous Fixation with K-wires (n=80), Locking Compression Plate (n=75), and External Fixation (n=77). It was observed that the clinical appearance of the wrist joint was remarkably better in patients treated with Locking Compression Plate (93.3%) than Percutaneous Fixation with K-wires and External Fixation. Better treatment outcome with regard to the restoration of movements of the wrist joint and resumption of normal activities was noted for patients treated with Locking Compression Plate (96%) than Percutaneous Fixation with K-wires and External Fixation.

**Conclusions:** Our study concludes that Locking Compression plate is a better treatment option for fracture of distal radius than the percutaneous fixation, and external fixation methods.

**Keywords:** Distal radius fracture, K-wires, Locking Compression