

## **Intramedullary Screw Fixation of Distal Ulna in Distal Radius Fractures**

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### **INTRODUCTION:**

Distal ulna fractures in the setting of distal radius fractures occasionally require fixation. Various stabilization methods exist, but no consensus on the optimal technique exists. We investigated the use of intramedullary screws for distal ulna fixation.

### **METHODS:**

This retrospective review examines patients who underwent distal radius fixation from 2014 to 2024 by a single surgeon. Patients were categorized based on the presence and type of associated ulna fracture and fixation method. Data were collected on patient-reported outcomes, including the Visual Analogue Scale (VAS) and Disabilities of the Arm, Shoulder, and Hand (DASH) scores.

### **RESULTS:**

A total of 477 patients were analyzed in this study. 214 patients sustained a distal radius fracture without an associated distal ulna fracture. Among these, 140 patients had a mean VAS of 2, and 118 patients had a mean DASH of 34. In contrast, 248 patients sustained a distal radius fracture with a concomitant distal ulna fracture that was not surgically treated. Of these, 139 patients had a mean VAS of 5, while 133 patients had a mean DASH of 48. 15 patients underwent surgical fixation of a concomitant distal ulna fracture. Among the 11 patients treated with an ulnar intramedullary screw, eight had a mean VAS of 1, and five had a mean DASH of 46. Two patients underwent plating of the distal ulna; one had a VAS of 0, and one had a DASH of 59. Overall, for patients who received any form of ulnar fixation, the mean VAS was 1, and the mean DASH was 50.

### **DISCUSSION AND CONCLUSION:**

Distal ulna fractures that are untreated result in higher pain and worse functional outcomes. Surgical fixation with intramedullary screw fixation is associated with improved outcomes. This technique may be a viable option in patients with concurrent distal ulna fractures.