

Ulnar Styloid Fracture in Association with Distal Radius Fracture Portends Poorer Outcome

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Purpose: The literature is mixed on the effect of fractures of the ulnar styloid on ipsilateral distal radius (DR) fracture. The purpose of this study was to determine if an associated ulnar styloid fracture (USF) negatively impacted the outcomes of patients who had sustained an ipsilateral DR fracture.

Methods: We have conducted a retrospective evaluation of 373 patients who had sustained a DR fracture and were treated at our institution over a 7-year period. Of these patients, 217 were treated operatively, and 156 were treated nonoperatively. In each of these groups, patients who had an associated USF were identified. Patients were followed for a mean of 11 months. At follow-up intervals, patients were assessed with the Disabilities of the Arm, Shoulder and Hand (DASH) and Short Form-36 (SF-36) clinical outcome scores, along with functional parameters such as grip strength and wrist and finger range of motion (ROM). Radiographic parameters were followed and complications were recorded. Statistical analysis was performed using Student *t*-test.

Results: Overall, patients who sustained USF along with DR fracture experienced more pain (1.80 ± 2.37 vs. 1.31 ± 1.95 ; $P = 0.033$) and worse DASH scores (16.81 ± 18.86 vs. 12.84 ± 17.40 ; $P = 0.04$) at latest follow-up. Among patients who underwent surgical fixation of their DR fractures, those with concomitant USF also had more pain and poorer DASH functional scores than did those patients without USF. The presence of USF appeared to have no effect on outcomes among patients treated nonoperatively for DR fracture.

Conclusion: The presence of USF with DR fracture is associated with worse pain scores and lower function than those without, especially among those patients requiring surgical fixation.