Active individuals >65 years old do not have an increased odds of a poor outcome following distal radius fracture

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**Introduction:** Distal radius fractures (DRF) are common in individuals over 65 years old. Management algorithms have favored a non-operative approach in this cohort given our understanding of satisfactory outcomes despite anatomic malalignment. The purpose of the current study was to evaluate the influence of activity level on outcomes following DRF in patients older than 65 years.

**Methods:** A prospective cohort of 81 elderly (aged ≥ 65 years) patients with DRF were recruited from a tertiary care referral center. The influence of activity level, based on the Rapid Assessment of Physical Activity (RAPA) score, on 1 year post-injury Patient-Rated Wrist Evaluation (PRWE) scores was investigated. The odds ratio (OR) of a poor PRWE outcome was calculated with 95% confidence intervals.

**Results:** The majority of the cohort (n=67, 83%) had a good PRWE outcome and were treated non-operatively (n =66, 81%). Average radiographic parameters for our cohort were an UV of 1.9mm +/- 1.9mm (+/-SD), RI of 18.7° +/- 5.9° (+/-SD) and dorsal tilt of 4.5° +/- 11.9° (+/-SD). The OR of a poor PRWE outcome was not significant for active individuals (OR 1.13, CI 0.34 – 3.79, p = 0.84).

**Conclusion:** Our study provides further support for non-operative management of patients over 65 years old with distal radius fractures. Activity level does not appear to influence the likelihood of a poor outcome.