Volar locking-plate and kirschner-wire fixation did not differ in terms of functional outcomes after dorsally displaced distal radial fracture

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Many questions remain unanswered by this randomized, blinded, controlled trial by Costa and colleagues. Most notably, why were the postoperative results in the first six weeks, when the benefits of internal plate fixation might reasonably be expected to be most obvious, not reported? In addition, the absence of any sort of radiographic follow-up or estimation of articular or extra-articular reduction in the two groups leaves the following question unanswered: Given that the two groups were not statistically different at one year, is there a reasonable expectation of either equality or non-difference after additional follow-up? If one recalls the data of Goldfarb et al. demonstrating the total absence of a correlation between radiocarpal osteoarthritis and disability at fifteen years of follow-up, this may not matter; however, the data gathered during this study could be useful in this regard.

Other difficulties with the study are that a substantial number of the operative procedures were done by “trainees” and that some of the complications and neurological injuries were reported in a selective manner. Because of this, questions remain. How does one refracture a distal part of the radius that was treated operatively with internal fixation? Were plates removed? Were these pin injuries to the lateral antebrachial cutaneous nerve and internal fixation injuries to the median and ulnar nerves?

These concerns notwithstanding, the authors showed that if the surgeon is facile at either percutaneous pinning or internal fixation of these fractures, similar functional results might be reasonably expected at one year of follow-up. What this study does not tell us is whether early postoperative function is improved in either group or whether either method is better in terms of obtaining and maintaining operative reduction. The long-term functional sequelae of these issues remain unknown.

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