

Intra-articular Distal Radius Fracture Treatment Using Plate and Screw Fixation

Case Study

Nathan Edwin Lesley, MD

A 41-year-old female with an intra-articular distal radius fracture was treated with the Acu-Loc 2 Wrist Plating System.



Acumed® is a global leader of innovative orthopaedic and medical solutions.



We are dedicated to developing products, service methods, and approaches that improve patient care.

Case Study | Nathan Edwin Lesley, MD



Patient History

The patient is a 41-year-old female who was referred after a fall that occurred at work. She had been seen in the emergency department and was informed that she had sustained a nonoperative wrist fracture. She presented in a splint with moderate (6/10) pain. The original X-rays revealed a minimally displaced, intra-articular fracture of the distal radius. Repeat X-rays indicate a subtle, subluxed position of the lunate. A CT scan was ordered, which confirmed a significant articular gap in the sagittal plane, with fracture lines extending through the volar and dorsal cortices. Operative treatment was recommended.

Treatment

Intraoperatively, volar and proximal displacement of the volar 30 percent of the distal radius was observed. The fragment was reduced and an Acu-Loc 2 plate was implanted. A nonlocking screw was first placed through the slotted shaft hole, using the plate to buttress the distal fragment. Locking distal screws and nonlocking proximal screws completed the construct.

Postoperative Care

Postoperatively, the patient was placed in a nonremovable wrist splint, followed by a removable wrist splint with gentle ROM instructions beginning at 10 days. At three months follow-up, the patient had achieved 80 degrees of flexion, 80 degrees of extension, and full pronation/supination.

Discussion

Distal radius fractures often have underappreciated/unrecognized intraarticular components which, if treated nonoperatively, can result in posttraumatic arthritis. CT scans can be used to better assess these fractures. A volar distal radius plate is ideal for achieving compression of intra-articular fractures displaced in the sagittal plane. By using a nonlocking screw through the slotted hole of the Acu-Loc 2 plate, a buttress effect is achieved with these volar Barton-type fracture patterns.



HNW70-13-A | Effective: 2017/08 | © 2017 Acumed® LLC

Acumed® Headquarters
5885 NW Cornelius Pass Road
Hillsboro, OR 97124
Office: 888.627.9957
Fax: 503.520.9618
www.acumed.net

These materials contain information about products that may or may not be available in any particular country or may be available under different trademarks in different countries. The products may be approved or cleared by governmental regulatory organizations for sale or use with different indications or restrictions in different countries. Products may not be approved for use in all countries. Nothing contained on these materials should be construed as a promotion or solicitation for any product or for the use of any product in a particular way which is not authorized under the laws and regulations of the country where the reader is located. Specific questions physicians may have about the availability and use of the products described on these materials should be directed to their particular authorized Acumed distributor. Specific questions patients may have about the use of the products described in these materials or the appropriateness for their own conditions should be directed to their own physician.