

Case Study

Use of the INnate™ Intramedullary Threaded Nail to Treat Right Distal Ulna Nonunion



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Dr. Dane Daley, a graduate of East Tennessee State University College of Medicine, completed a hand fellowship while at OrthoCarolina. He specializes in orthopedic and hand surgery.

Case Presentation

A 67-year-old right-hand-dominant male was referred for ongoing wrist pain following nonoperative management with short arm cast for a distal ulna fracture. He was diagnosed with a symptomatic right distal ulna nonunion affecting his activities of daily living. After further discussion, he opted for surgical stabilization with open nonunion debridement, bone grafting, and skeletal stabilization with the INnate™ Intramedullary Threaded Nail.

Preop Plan

Dane Daley, MD, elected to treat with a small ulnar-sided incision with nonunion debridement, bone grafting, and fixation with a 4.5 mm x 75 mm intramedullary INnate nail.

Operative Findings and Approach

A small ulnar-sided incision was made, and the nonunion was taken down and a guidewire was passed retrograde through the ulnar head and across the nonunion site via direct visualization and fluoroscopic assistance. The cannulated drill was then used, a size 4.5 mm x 75 mm INnate nail was measured for, and the threaded cannulated INnate was placed. The INnate nail was driven in until positioned beneath the articular surface, maintaining good purchase in subchondral bone. Proximal purchase was achieved with intracortical fit.

Follow-up

Postoperatively, the patient was splinted with a short arm splint with follow-up at two weeks. At that time, the splint was removed and he was transitioned to removable wrist brace, early active range of motion, protected weight-bearing, and referral to occupational hand therapy. He had subsequent follow-up appointments at six weeks, three months, and 4.5 months with progressive range of motion and strength.

Preoperative



Postoperative



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