

### Ultrasound-Guided Distal Radius Fracture Reduction

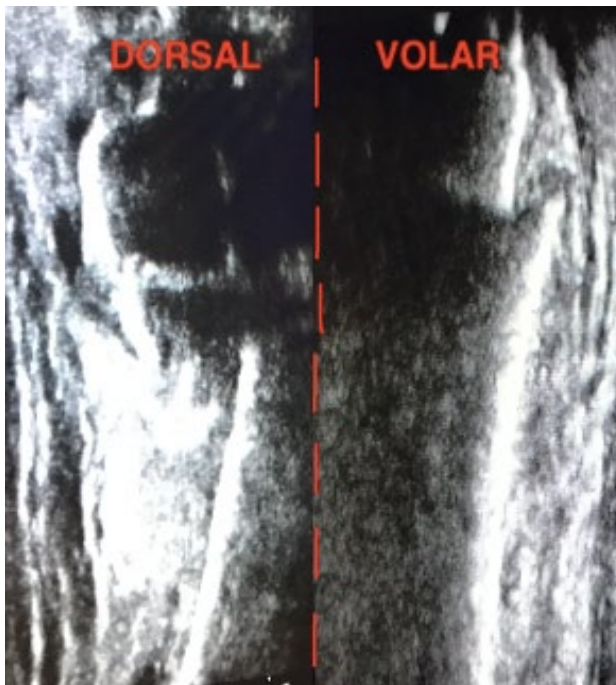
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**Purpose:** The purpose of this report is to demonstrate how ultrasound imaging can be used as an alternative to fluoroscopy and provide a real-time assessment of a distal radius fracture reduction.

**Methods:** An 88-year-old woman with a closed dorsally displaced distal radius fracture elected to proceed with closed reduction. She underwent an ultrasound examination of the dorsal, radial, and volar cortices. Closed reduction was performed with regional anesthesia followed by repeat ultrasound examination. The reduction was assessed with fluoroscopy also.

**Results:** Distal radius fracture displacement can be seen on ultrasound imaging prior to the reduction. The projection of the volar and dorsal surfaces can be viewed side by side to create an anatomic representation of the distal radius fracture (Fig.1). Post-reduction ultrasound and fluoroscopy demonstrated reduction of the volar cortex, the dorsal comminution, and radial translation. The patient was followed post-procedurally with serial plain radiographs and healed uneventfully.

**Conclusion:** Ultrasound is a feasible option for real-time reduction assessment when fluoroscopy is not available. The ultrasound technique described allows assessment of the volar cortex, dorsal cortex, and coronal translation of the distal radius.



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