

Distal Radius Fractures – Always volar? Graft? 2nd Plate

ORTHOPAEDIC TRAUMA BOOT CAMP

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- 1) Treatment Goals:
 - a. Anatomic/Near Anatomic Restoration
 - i. Radial Length
 - ii. Volar Inclination
 - iii. DRUJ Stability
 - b. Stability
 - i. Sufficient Strength to allow Early Functional Use
- 2) Options
 - a. Locked Volar Plating
 - i. Currently the Gold Standard?
 - ii. Reliable
 - iii. User Friendly
 - iv. Few Complications
 - b. Dorsal Plating
 - i. Extensive Early Experience
 - ii. Biomechanically Equivalent to Volar Plating
 - iii. Extensor Tensor Tendons Intimidating
 - iv. Perceived Difficulty
 1. 3rd vs 4th Compartment Exposure
 - c. Volar and Dorsal Plating
 - i. Special Circumstances
 1. Volar and /or Dorsal Rim Fractures
 2. Lunate Facet Fractures, i.e., Volar or Dorsal Corner
 3. Efficacy/Safety Demonstrated
 4. Allows Early Rehabilitation
 - d. Bone Grafting

- i. To Fill Metaphyseal Void/Crush
 - ii. Obsolete with Volar Locking Plates??
 - iii. Allograft vs Autograft vs BG Substitute?
 - 1. Biologics Not as Reliable
 - e. Additional Plate(s)
 - i. Volar-Dorsal
 - 1. Highly Comminuted DR Fx's
 - 2. See above
 - ii. Radial Styloid Plate
 - 1. Bi-planar Fixation
 - 2. Greater Strength/Fatigue Resistance
 - iii. Fragment Specific Fixation
 - 1. Technically demanding
 - 2. Less Soft Tissue Damage
 - 3. Allow for Early Rehabilitation
- 3) Conclusions
 - a. Use the Method Best Suited to Fracture Pattern
 - b. Use Method With Which Surgeon Most Familiar
 - c. Literature Fails to Support
 - i. Superiority of One Method Over Others
 - ii. Superiority of One Manufacturer Over Others

References

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