

Distal Radius Fractures: Dorsal or Volar

1. Classification

- a. AO/OTA
- b. mechanism

2. Surgical indications

- a. AAOS CPG
- b. shortening 3-5 mm
- c. articular step off ≤ 2 mm
- d. dorsal tilt < 10 degrees

3. Volar approach

- a. pros
 - i. good soft tissue envelope
 - ii. abundance of precontoured plates
 - iii. distal locking screws allow subchondral support
 - iv. volar cortex can determine length
 - v. buttress volar displacement
 - vi. extensile approach/carpal tunnel release
- b. cons
 - i. difficult to determine end of radius
 - ii. unable to visualize articular surface
 - iii. articular surface penetration
 - iv. dorsal surface penetration and extensor tendon rupture
 - v. difficult to reduce bone to plate distally

4. Dorsal approach

- a. pros
 - i. dorsal fixation and reduction for dorsal displacement
 - ii. articular reduction via dorsal capsulotomy
 - iii. allows for S-L ligament assessment/repair
- b. cons
 - i. thinner soft tissue envelope
 - ii. dorsal comminution may prevent accurate reduction/length
 - iii. extensor tendon irritation
 - iv. may require pre-contoured plate