

# Salvage Procedures for the Arthritic Wrist

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Hand to Shoulder Specialists of Wisconsin

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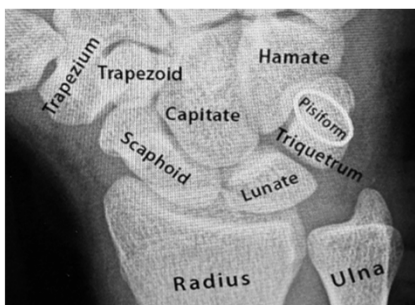
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## Scapholunate Advanced Collapse (SLAC)

- Pattern of arthritis seen in chronic dissociation of the scaphoid and lunate bones
- Clinical diagnosis: dorsal wrist swelling, progressive wrist pain, and decrease in ROM
- Radiographs reveal a predictable pattern of radiocarpal and midcarpal joint arthritis
- Many patients fail conservative management

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### Scapholunate Instability

- S-L ligament becomes incompetent
  - Acute traumatic tear...FOOSH
  - Chronic degeneration to failure ...Gout/CPDD
- Scaphoid rotates into increased flexion
- Lunate extends (tips backwards)
- Incongruent joint surfaces progressively degenerate

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### Classification

- Degeneration begins in the radioscaphoid joint
  - First at the radial styloid (Stage I)
  - Followed by the rest of the radioscaphoid joint (Stage II)
- Capitate settles into the gapped unstable S-L joint
- Midcarpal joint becomes arthritic (Stage III)
  - Capitoulunate and scaphocapitate joints degenerate
- Radiolunate joint involvement (Stage IV)

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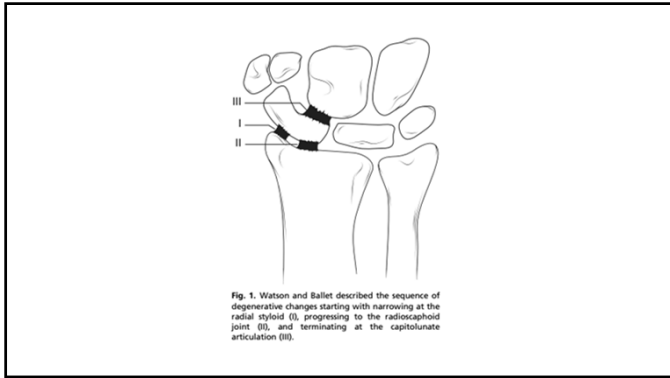
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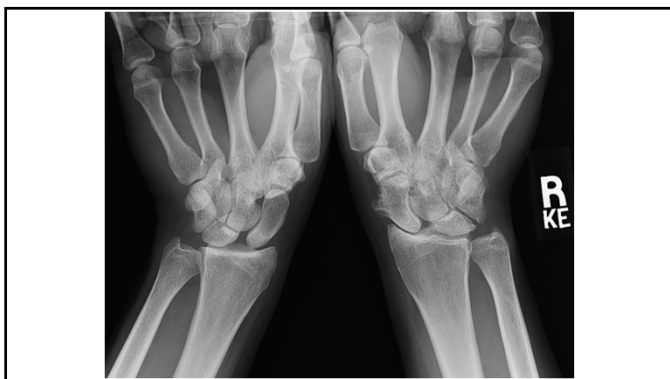
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### SLAC Treatment

- Splinting, NSAIDS, corticosteroid injection
- Radial styloidectomy (Stage I)
- Denervation: AIN and PIN neurectomy
- Proximal Row Carpectomy (Stage II)
- Scaphoidectomy and midcarpal arthrodesis (four corner or capitolunate only) with radial styloidectomy (Stage III)
- Total wrist arthrodesis or replacement arthroplasty (Stage IV)

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### SLAC Salvage Keys to Success

- Healthy lunate bone
- Scaphoidectomy without damaging palmar ligaments
  - Radioscaphocapitate ligament
  - Short and Long Radiolunate ligaments
- Neutral rotation of lunate; well aligned C-L fusion
- Full decortication of midcarpal joint
- Solid hardware construct

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### SLAC Salvage Post Op Protocol

- Loose fingertip to elbow splint, elevated, pain control
- <1 week: custom wrist cockup, restore finger motion
- 2 weeks: well fitted Delta-Cast wrist cockup
- 6-8 weeks: gentle AROM
- 8-12 weeks: full motion and load with radiographic fusion

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### Scaphoid Nonunion Advanced Collapse (SNAC)

- Specific pattern of wrist arthritis that results from chronic scaphoid nonunion
- Clinical diagnosis: swelling, pain, decrease ROM
- May only involve the distal pole of the scaphoid and the radial styloid
- Many patients desire surgical intervention when conservation tx fails (NSAIDS, splint, steroid injection)

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### SNAC Treatment

- Radial styloidectomy
- Excision of distal pole of scaphoid
- Proximal row carpectomy
- Scaphoidectomy and midcarpal arthrodesis
- Wrist arthrodesis
- All of the above +/- denervation (PIN)

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