

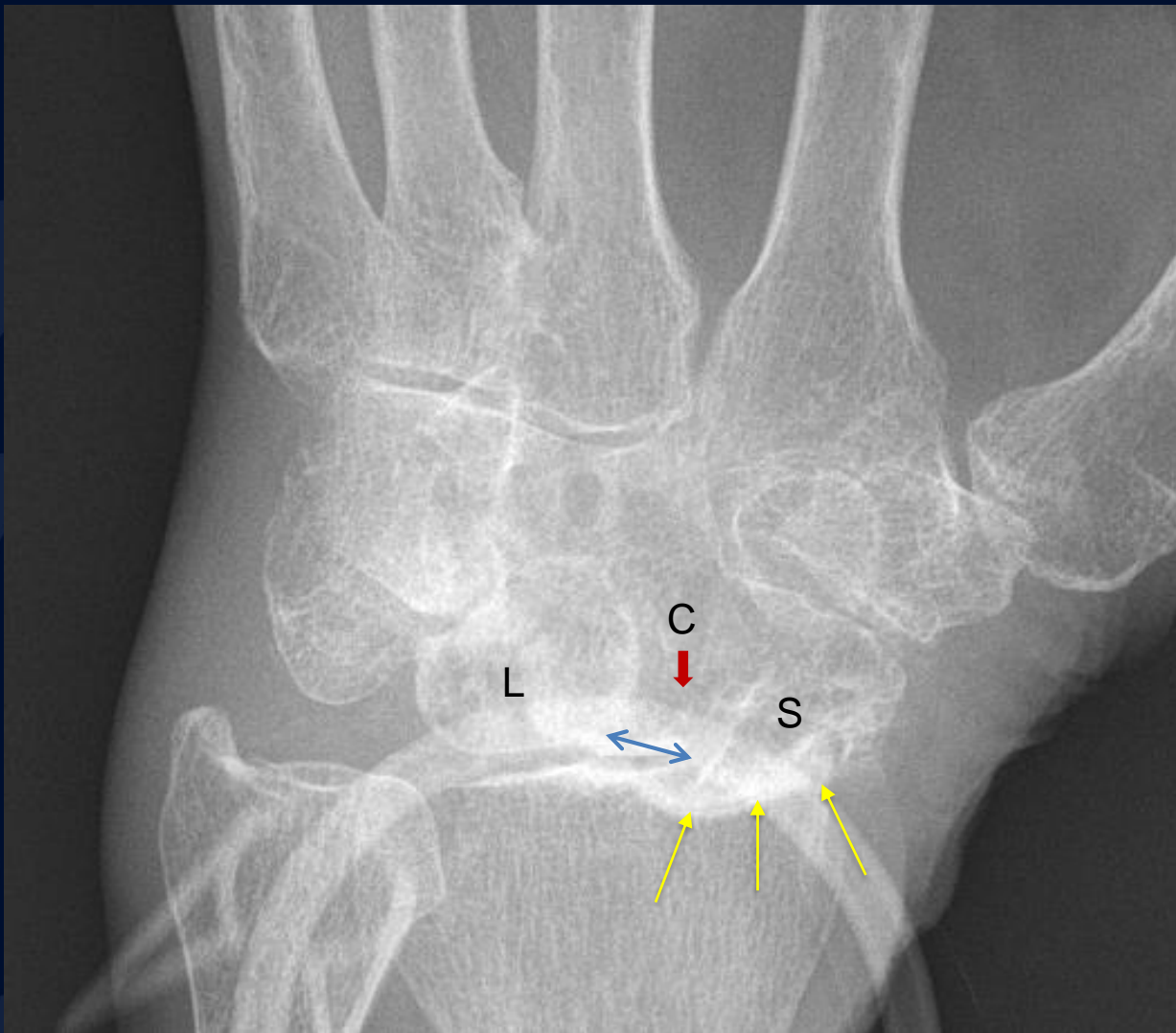
65 Year Old Woman Presents with Left Wrist Pain

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Sacpholunate advanced collapse (SLAC)



Frontal view of the wrist shows an abnormal scaphoid (S) with severe narrowing of the scaphoradio articulation (yellow arrows), widening of the scapholunate interval (blue arrow) and proximal capitate migration (red arrow indicating direction).

Etiology

- Traumatic causes
 - Scaphoid fracture
 - Scapholunate ligament tear
- Atraumatic causes
 - Calcium pyrophosphate dehydrate deposition disease
 - Rheumatoid arthritis
 - β 2- microglobulin associated amyloid deposition disease
 - Neuropathic diseases

Pathophysiology

- Sequela of untreated scaphoid fracture and/or chronic scapholunate ligament injury, leads to radial-side collapse with volar flexion of the scaphoid
- Lunate is no longer tethered by the SL ligament and dorsiflexes
- Eventually, leads to DISI with separation between the proximal pole of the scaphoid and the lunate, with proximal migration of the capitate.

Management

- Non-operative
 - Address underlying cause
 - NSAIDs, wrist immobilization with splints
 - Corticosteroid injections
- Operative
 - Radial styloidectomy
 - Wrist denervation of anterior interosseous nerve or posterior interosseous nerve
 - Proximal row carpectomy
 - Partial wrist arthrodesis

References

1. DeWeber, K. (2018). Scaphoid fractures. UpToDate.
2. Shah, C. M., & Stern, P. J. (2013). Scapholunate advanced collapse (SLAC) and scaphoid nonunion advanced collapse (SNAC) wrist arthritis. *Current reviews in musculoskeletal medicine*, 6(1), 9-17.
3. Tischler, B. T., Diaz, L. E., Murakami, A. M., Roemer, F. W., Goud, A. R., Arndt, W. F., & Guermazi, A. (2014). Scapholunate advanced collapse: a pictorial review. *Insights into imaging*, 5(4), 407-417.
4. Wong K., Gillis E. Scapholunate Advanced Collapse. Radiology Online. (2020)