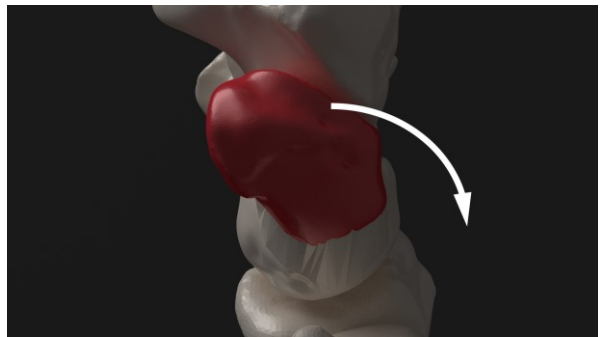
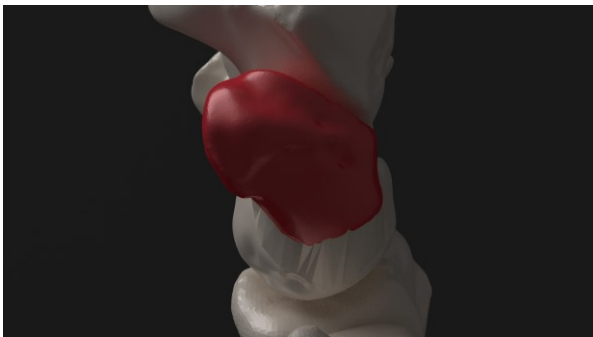
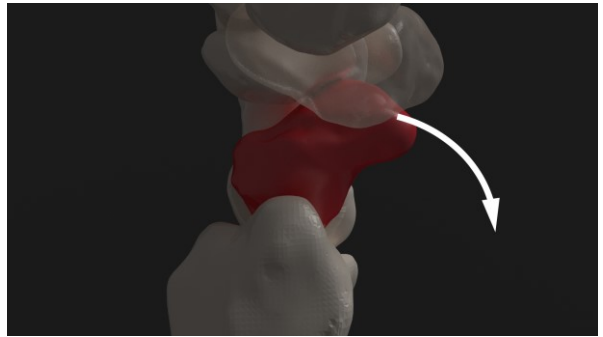
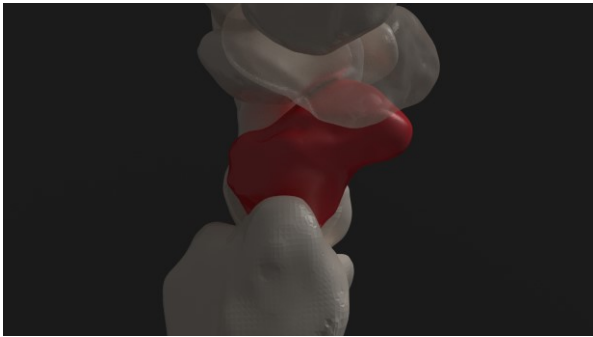
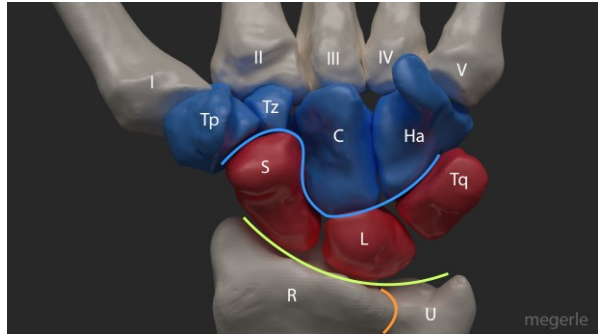


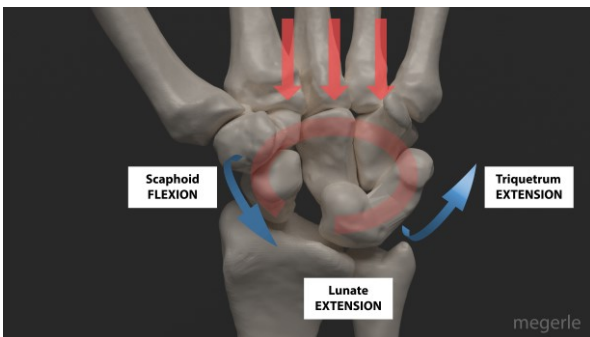
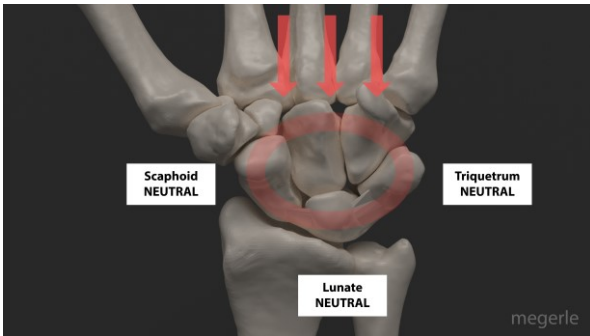
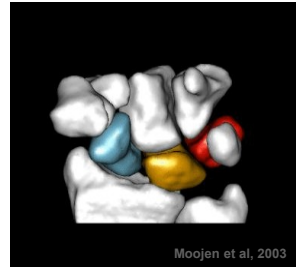
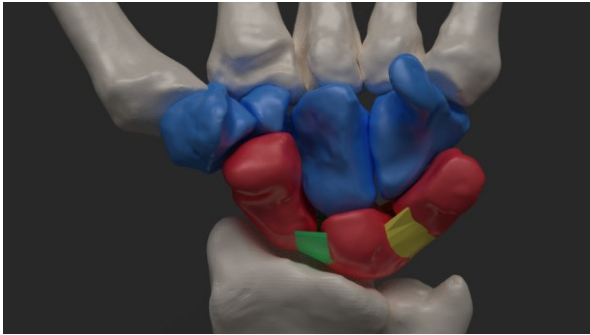


Beyond the SL Ligament – the role of secondary stabilizers

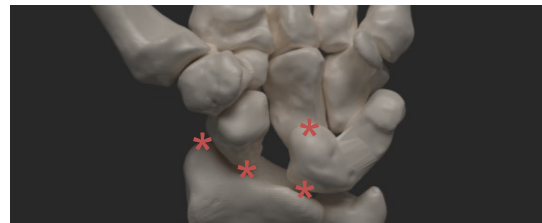
Kai Megerle

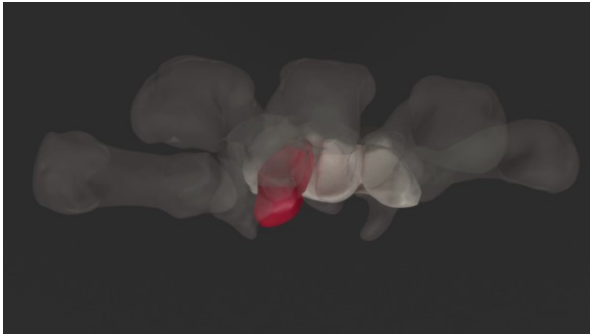
Center for Hand Surgery, Microsurgery and Plastic Surgery
Schön Klinik Munich



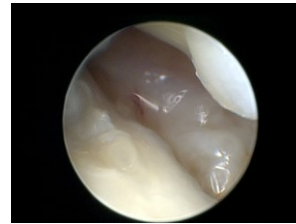


SLAC wrist

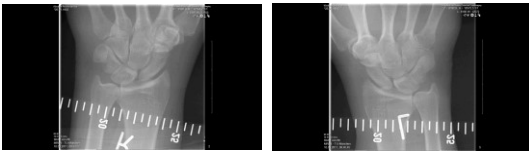




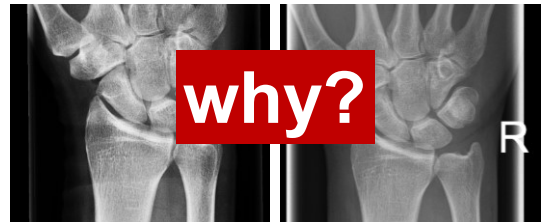
Pt with complete SLL tear (Geissler IV)



Pt with complete SLL tear (Geissler IV)



Follow-up after 5 ½ years: VAS 0



SL ligament injury
 ≠
 Instability
 ≠
 Joint Degeneration



secondary stabilizers

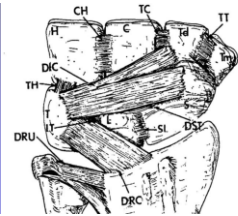
> J Bone Joint Surg Am. 2019 Aug 7;101(15):1388-1396. doi: 10.2106/JBJS.18.01419.

Role of Ligament Stabilizers of the Proximal Carpal Row in Preventing Dorsal Intercalated Segment Instability: A Cadaveric Study

Alfonso J Pérez ^{1,2}, Rishabh G Jethanandani ³, Emil S Vutescu ³, Kathleen N Meyers ³, Steve K Lee ^{3,4}, Scott W Wolfe ^{3,4}

- isolated dissection of the SLL does not lead to DISI configuration
- critical stabilizers:
 - Long radiolunate Ligament (LRL)
 - palmar STT ligament
 - dorsal intercarpal ligament (DIC)

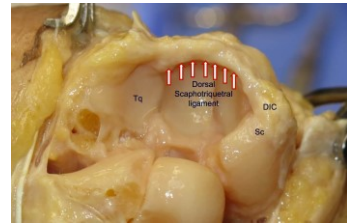
"classic" anatomy



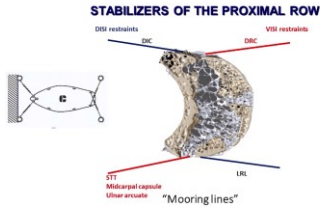
- DIC: dorsal Intercarpal lig.
- DRC: dorsal radiocarpal lig.
- DST: dorsal scaphotriquetral lig.

R. Berger, Hand Clinics 1997

Dorsal ST Ligament?



Stabilizing the lunate



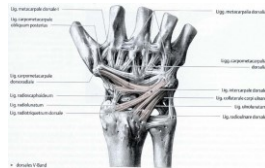
SLL injuries are associated with DIC alterations

[\[PubMed\] | J Hand Surg Am. 2019 Aug;44\(8\):641-646. doi: 10.1053/j.jhsa.2019.03.003. Epub 2019 Jun 26.](#)
 Dorsal Extrinsic Ligament Injury and Static Scapholunate Diastasis on Magnetic Resonance Imaging Scans
 Scott Dixon ¹, Arav Khemraj ², Wilson E Palmer ³, Neal C Chen ³
 All authors = equal
 PMID: 31047564 DOI: 10.1016/j.jhsa.2019.03.003

- 90 pts with SLL rupture
- SLD \geq 2mm associated with signal alterations in DIC/DRC

important secondary stabilizers

- **dorsal:**
 - Lig. Intercarpale dorsale (DIC) (DST?)
 - Lig. radiolunatum / Lig. radiotriquetrum dorsale (DRC)



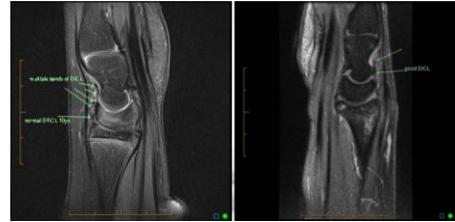
Important secondary stabilizers

- **palmar:**
 - Lig. radiolunatum longum (LRL)
 - Lig. radioscapocapitatum (RSC)
 - Lig. scaphotrapezium (palm. STT)



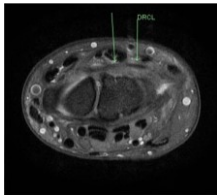
IMPLICATIONS: DIAGNOSTICS

normal anatomy

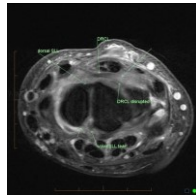


DICL rupture

normal



ruptured

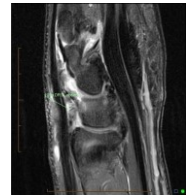


DRL rupture

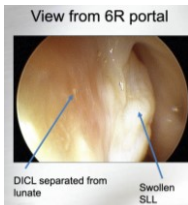
normal



ruptured



arthroscopy



- “bare area”
- ligament?
- capsular detachment?

IMPLICATIONS: APPROACH

Chronic SLD



1st postop day – no transfixation



Conclusion

- SLL ruptures can have very different clinical appearances
- Isolated SLL ruptures do not cause DISI configurations
- not all SLL ruptures need to be operated on
- Important secondary stabilizers:
 - Dorsal Intercarpal ligament (DIC)
 - palmar STT ligament
 - Long radiolunate ligament (LRL)
- use a window approach
- address secondary stabilizers in reconstruction (eg ANAFAB)

KMeerle@schoen-klinik.de