

Wrist instability:
MR findings without clinical significance



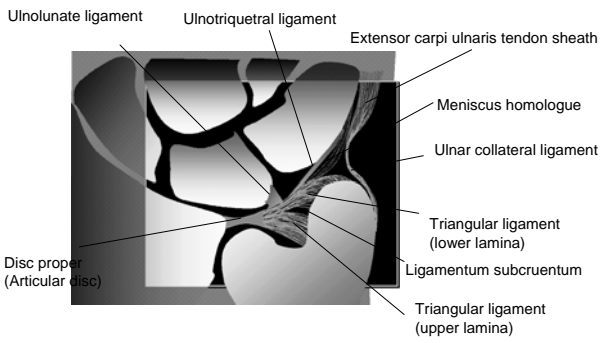
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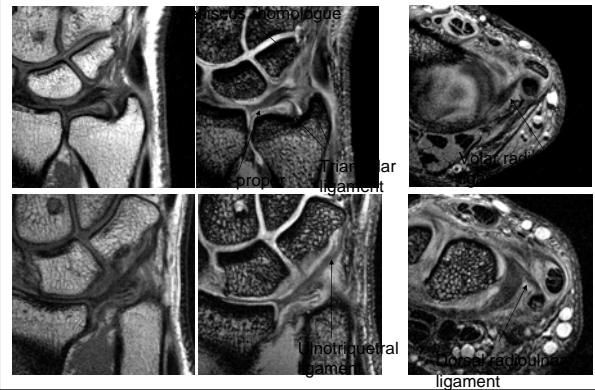
Outline

- Triangular fibrocartilage complex (TFCC)
- Lunotriquetral ligament (LTL)
- Scapholunate ligament (SLL)
- Extensor tendons

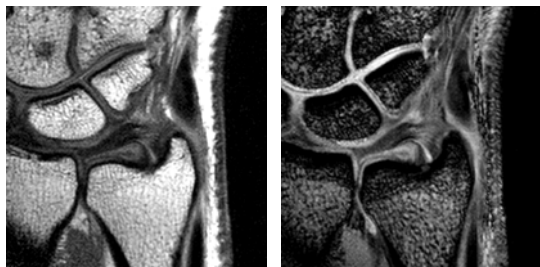
TFCC anatomy



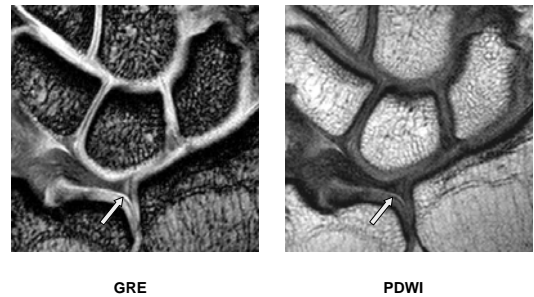
Normal TFCC using a microscopy coil



Triangular ligament



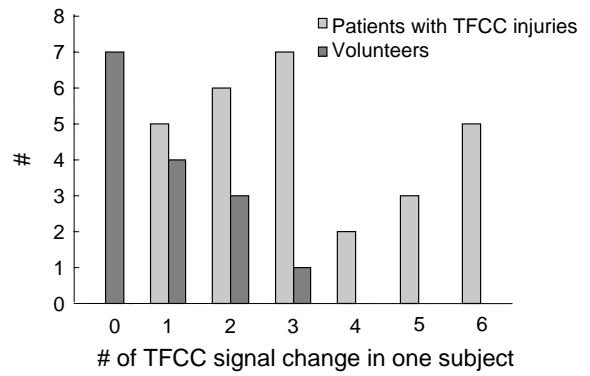
Degenerative change of TFCC



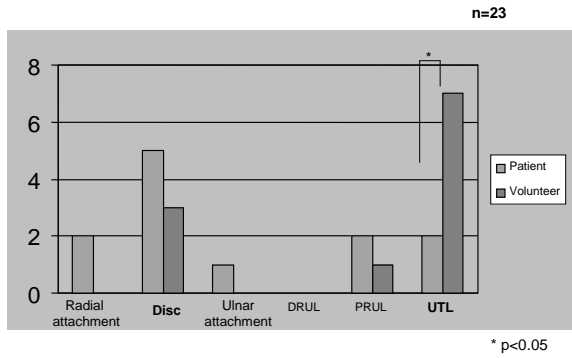
Central perforation of disc



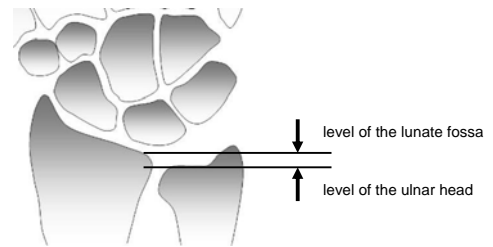
TFCC signal intensity changes



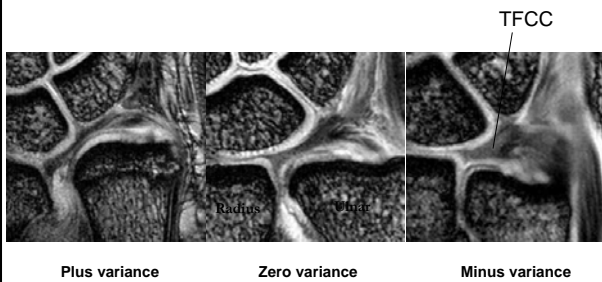
One abnormal signal within TFCC



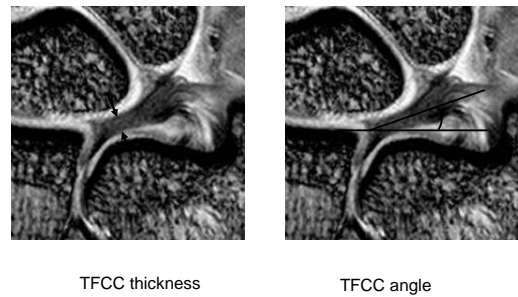
Ulnar variance vs TFCC



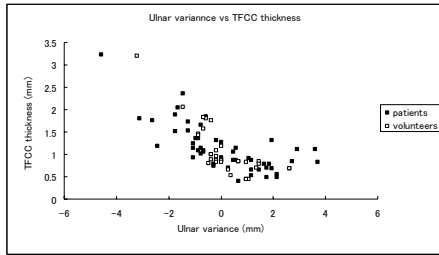
Ulnar variance vs TFCC



TFCC thickness and angle

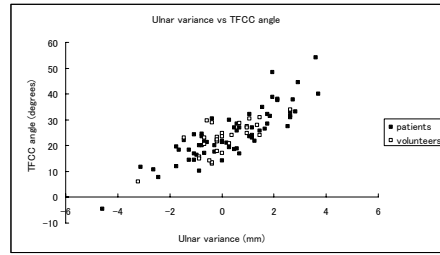


Ulnar variance vs TFCC thickness



Yoshioka et al. JMRI 2007; 26:714-719

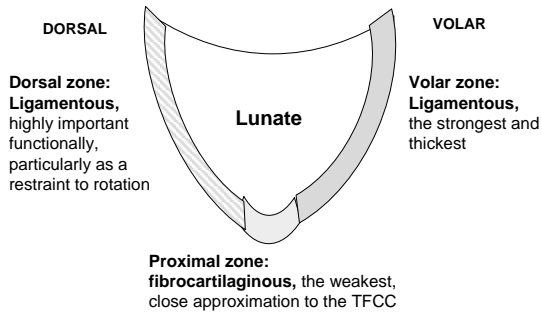
Ulnar variance vs TFCC angle



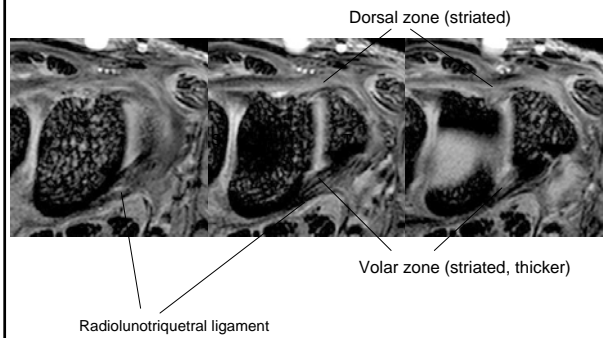
Yoshioka et al. JMRI 2007; 26:714-719

LTL anatomy – 3 regions -

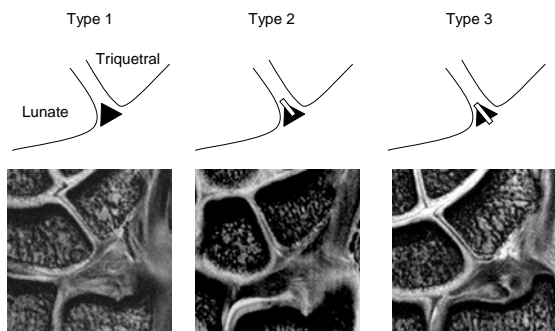
- V-shaped (20 mm in length)



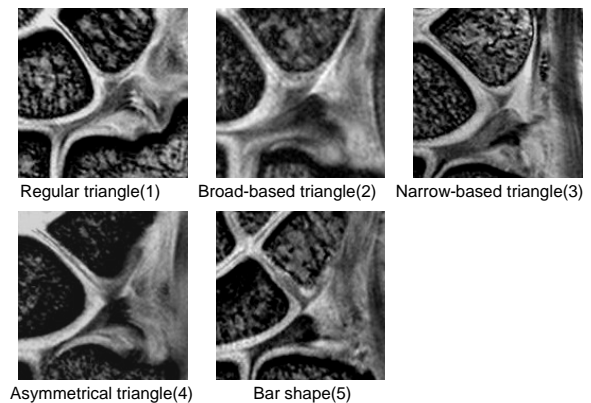
LTL – axial images



Lunotriquetral ligament (signal intensity)



Lunotriquetral ligament (shape)



Ulnar – radial deviated position in MRI



Ulnar-deviated position



Radial-deviated position

Ulnar – neutral - radial deviated position



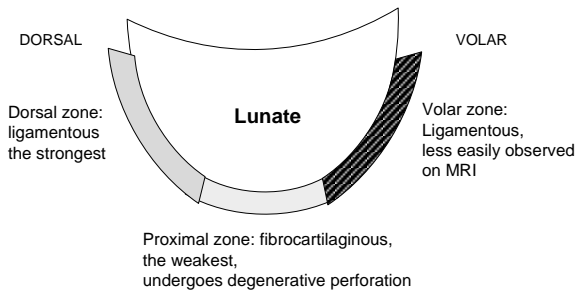
Ulnar-deviated position

Neutral position

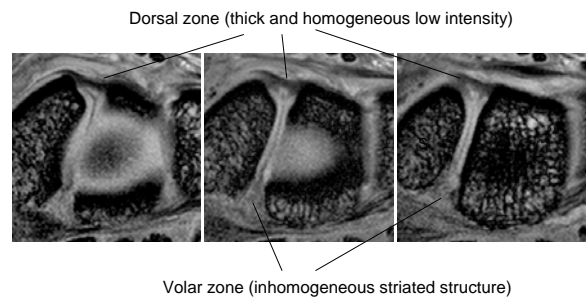
Radial-deviated position

SLL anatomy – 3 regions -

- Horseshoe-shaped or C-shaped (18 mm in length and 2-3 mm in thickness)

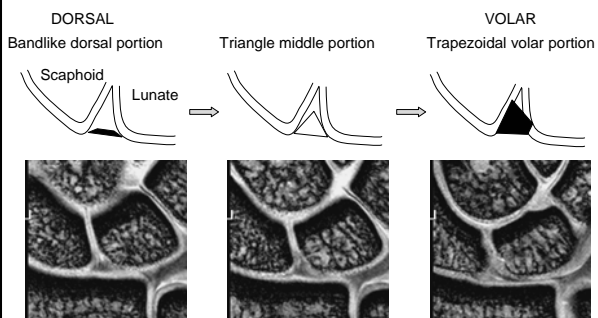


SLL – axial images

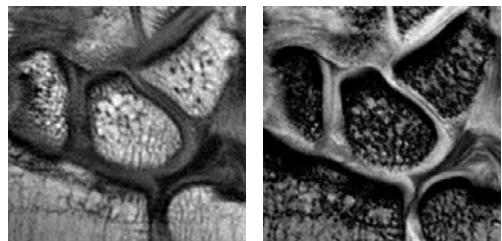


SLL shape

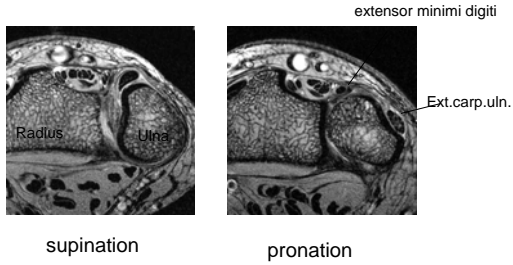
- Totterman SM, Miller RJ. Radiology 1996; 200:237-241



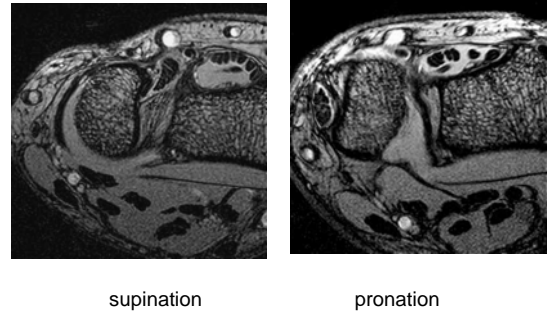
SLL variation?



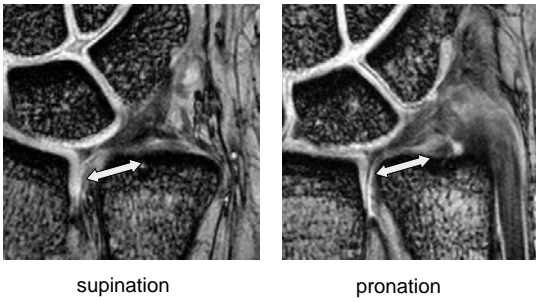
Extensor tendons - supination vs pronation -



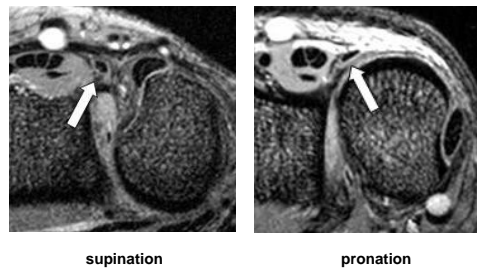
Morphological changes of TFCC: Supination – Pronation (axial)



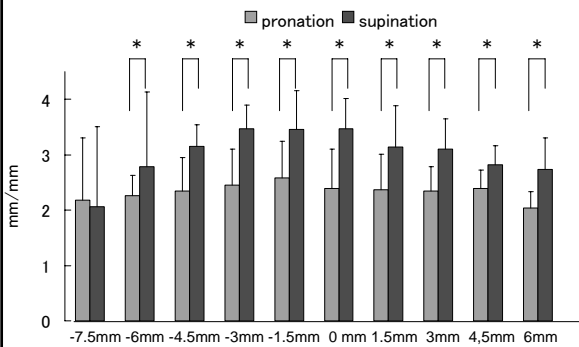
Morphological changes of TFCC: Supination – Pronation (coronal)



Extensor minimi digiti



Diameter of 5th extensor tendon compartment



OA patient with tendon rupture

