

Tips and Tricks of Advanced Imaging in Orthopedic Trauma

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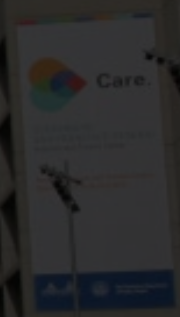


Disclosures

None

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Outline

- Clinical Tips and Tricks
 - Secondary Signs
 - Occult Fracture
 - Soft Tissue Injury
 - MRI Sequences
 - Pathologic Fracture versus Benign Fracture
- Logistical Tips and Tricks
 - Protocols and Planes
 - Imaging Optimization

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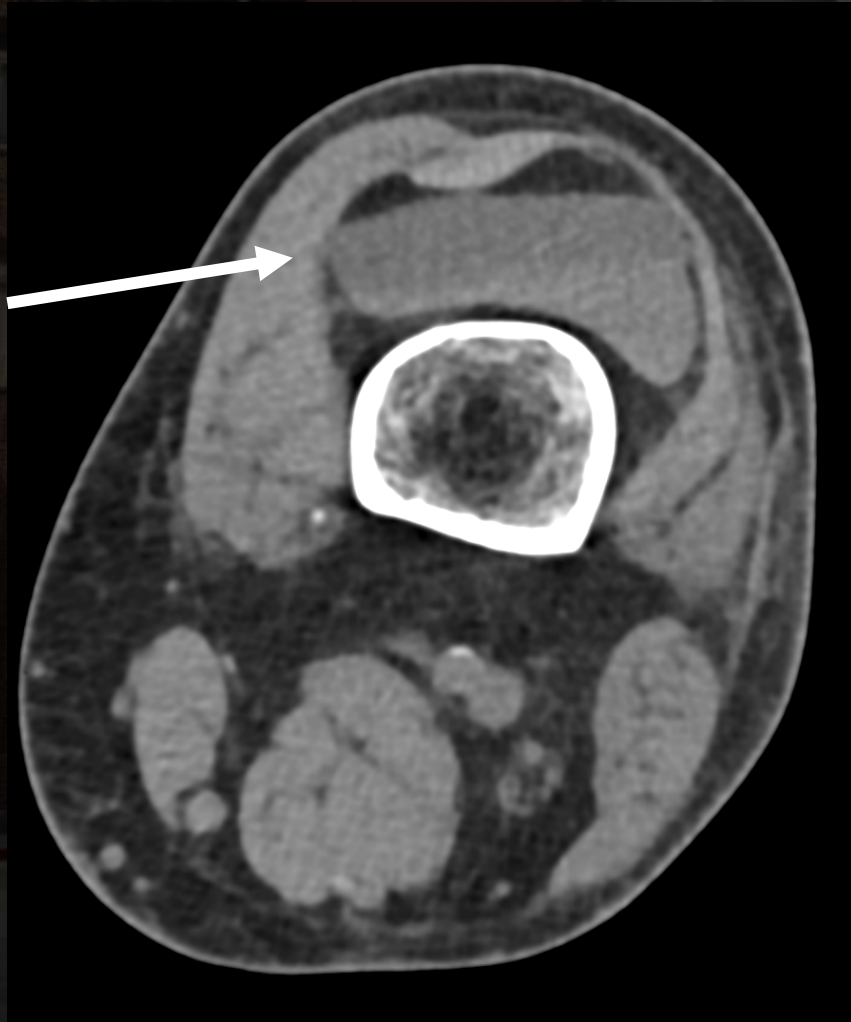
Secondary Signs of Occult Fracture

- Lipoarthrosis
- Lipohemobursa
- Extensor Compartment Lipoheme

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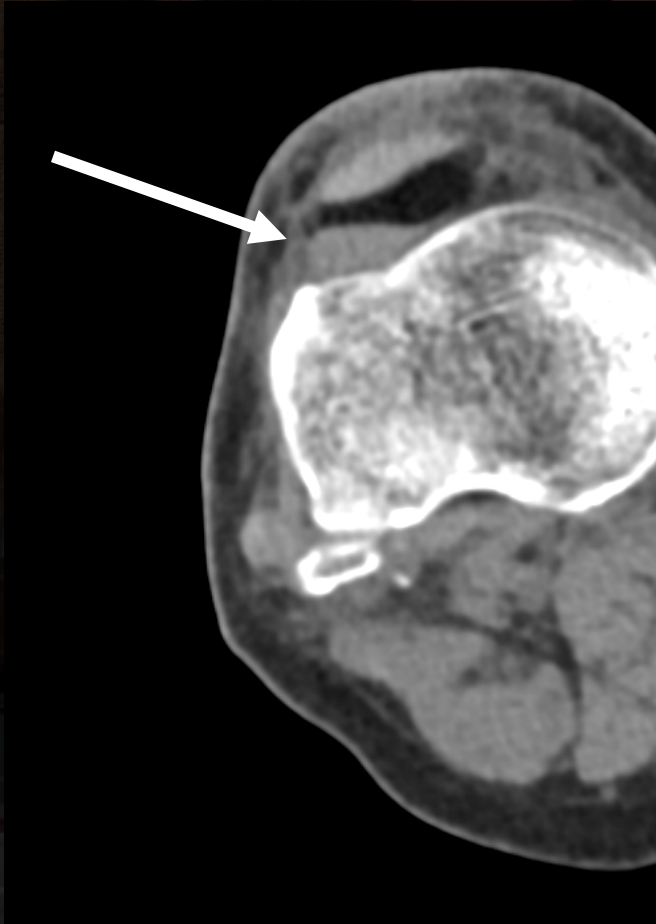
Lipohemarthrosis



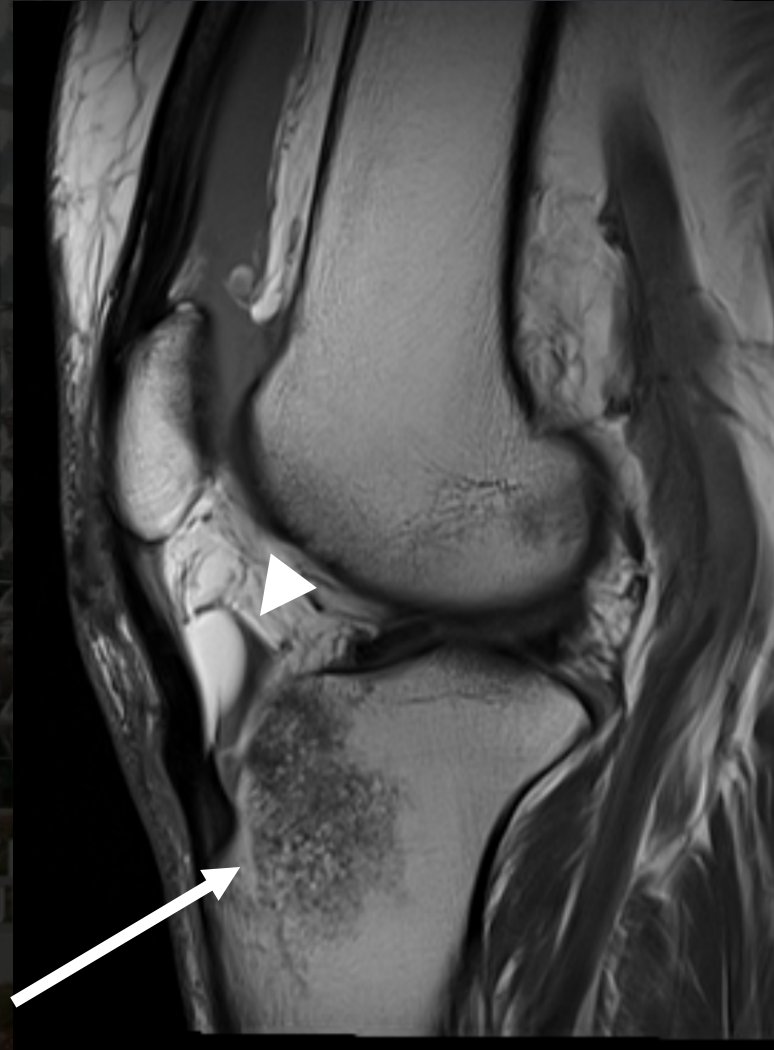
Lipohemarthrosis



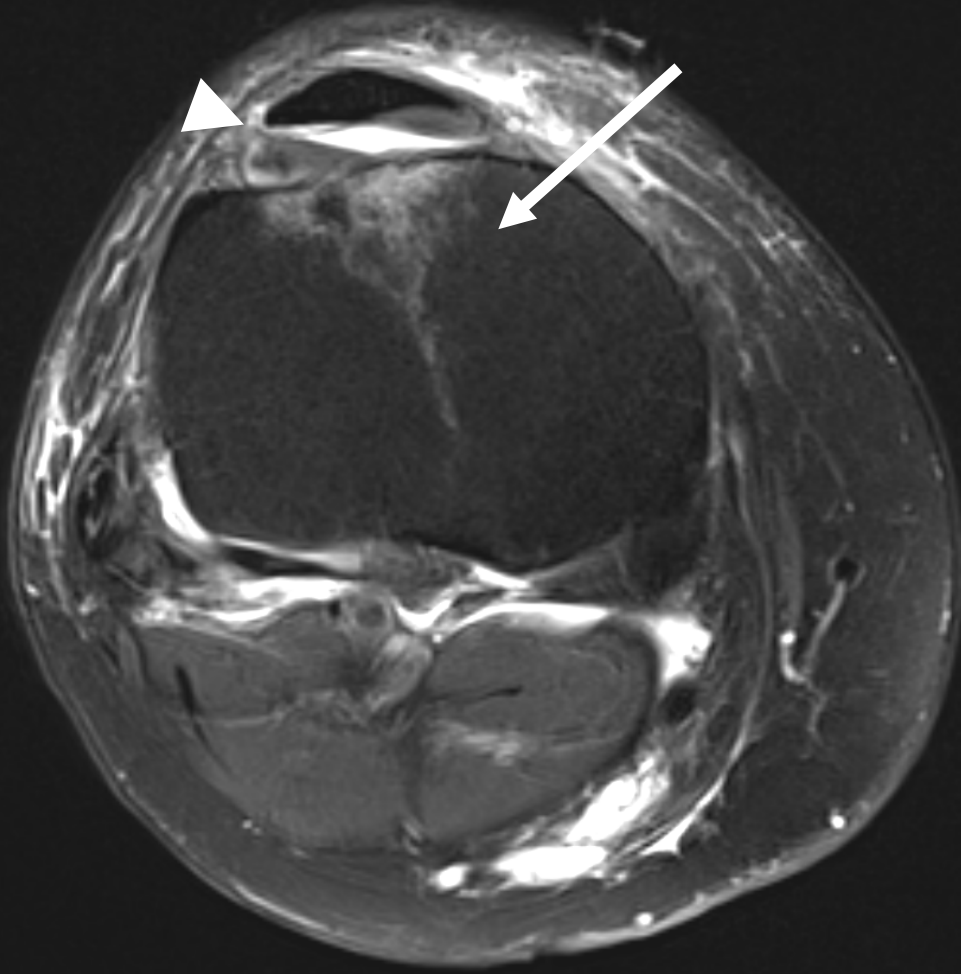
Lipohemobursa



Lipohemobursa



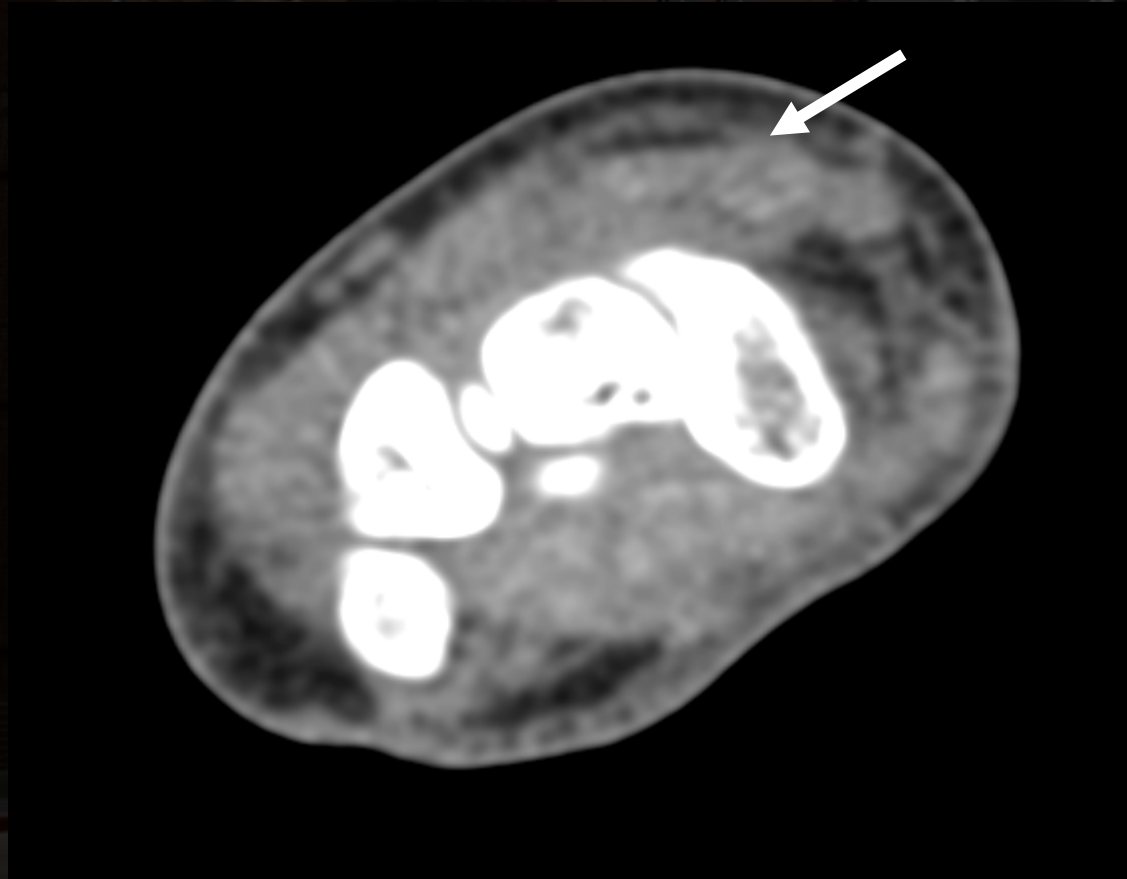
Lipohemobursa



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Extensor Compartment Lipoheme



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Extensor Compartment Lipoheme



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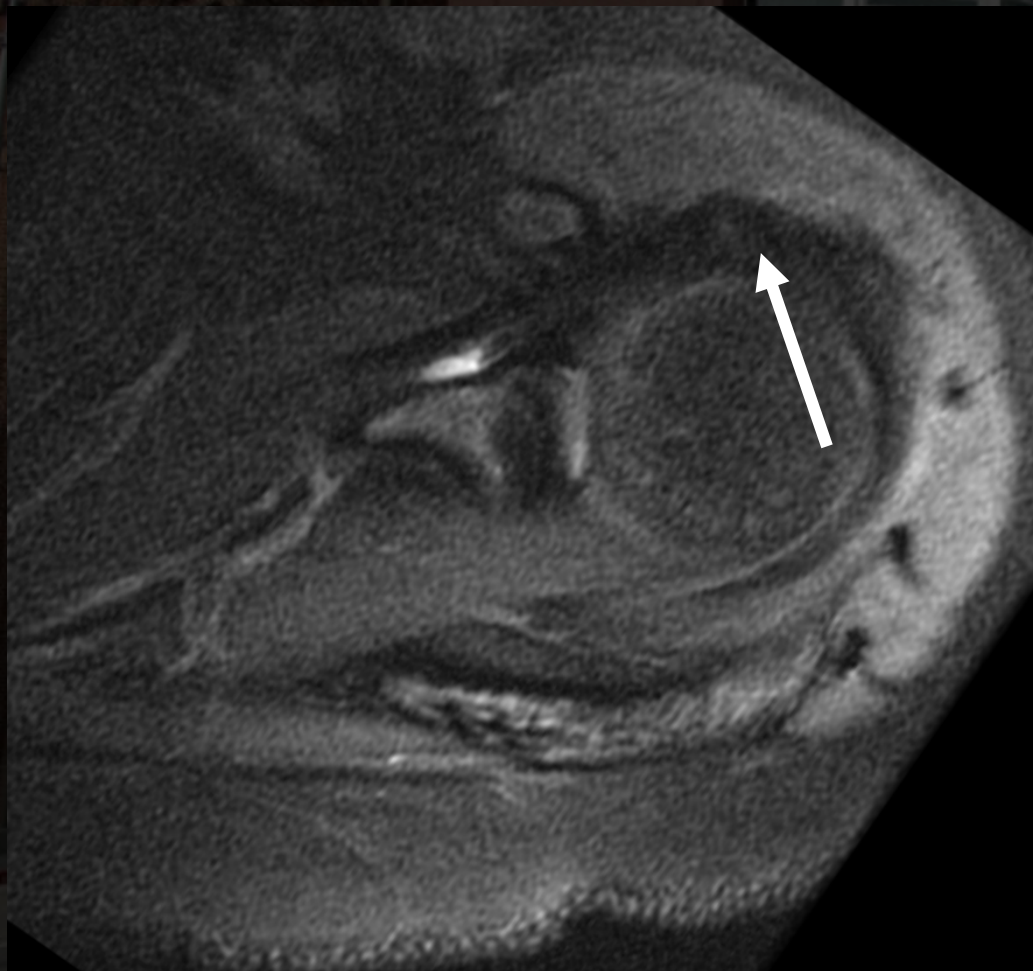
Secondary Signs of Soft Tissue Injury

- Subluxation of adjacent structures
- Uplifting of adjacent structures

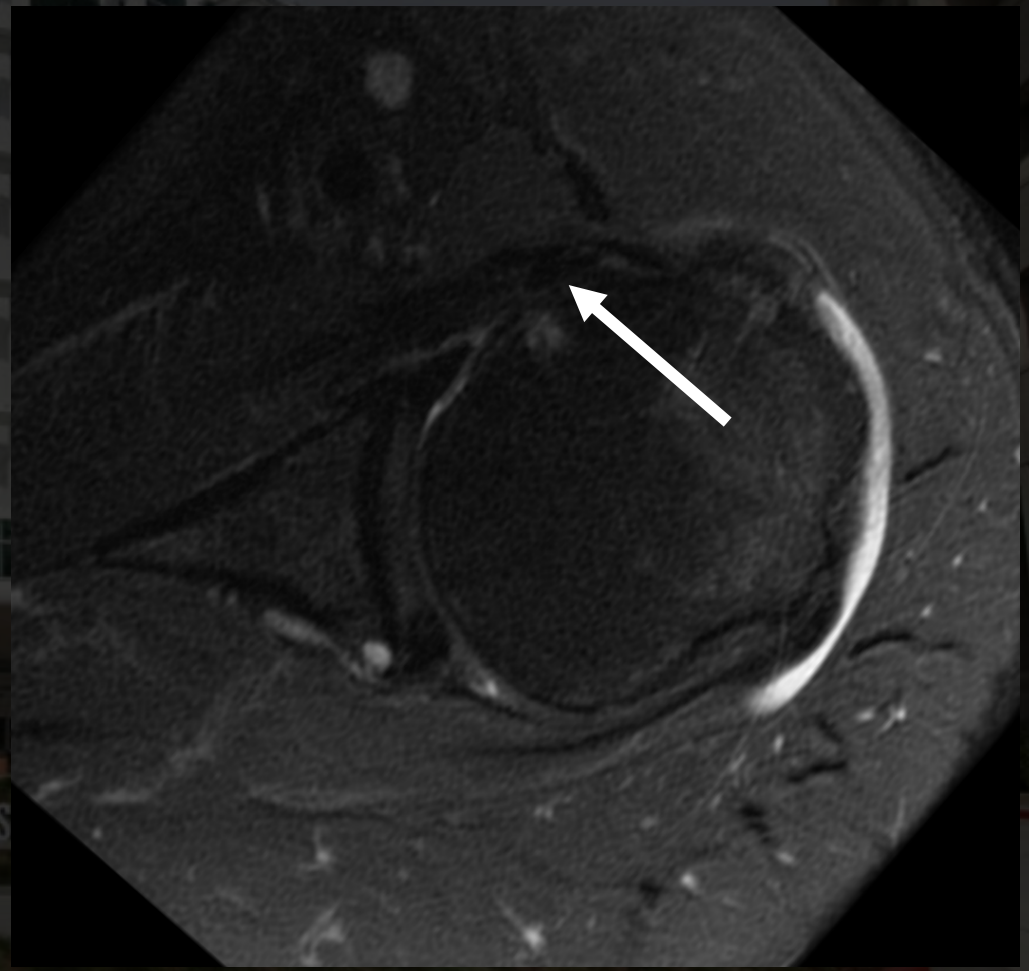
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Medial Subluxation of the Biceps Tendon



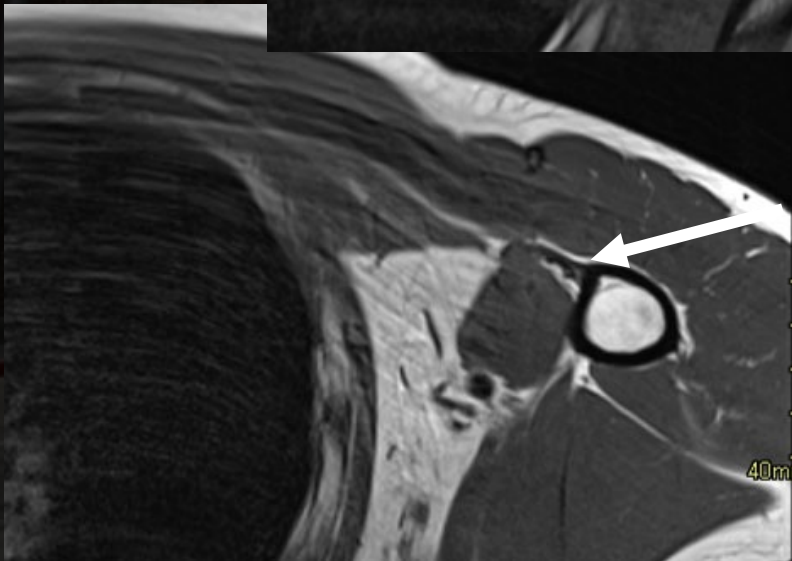
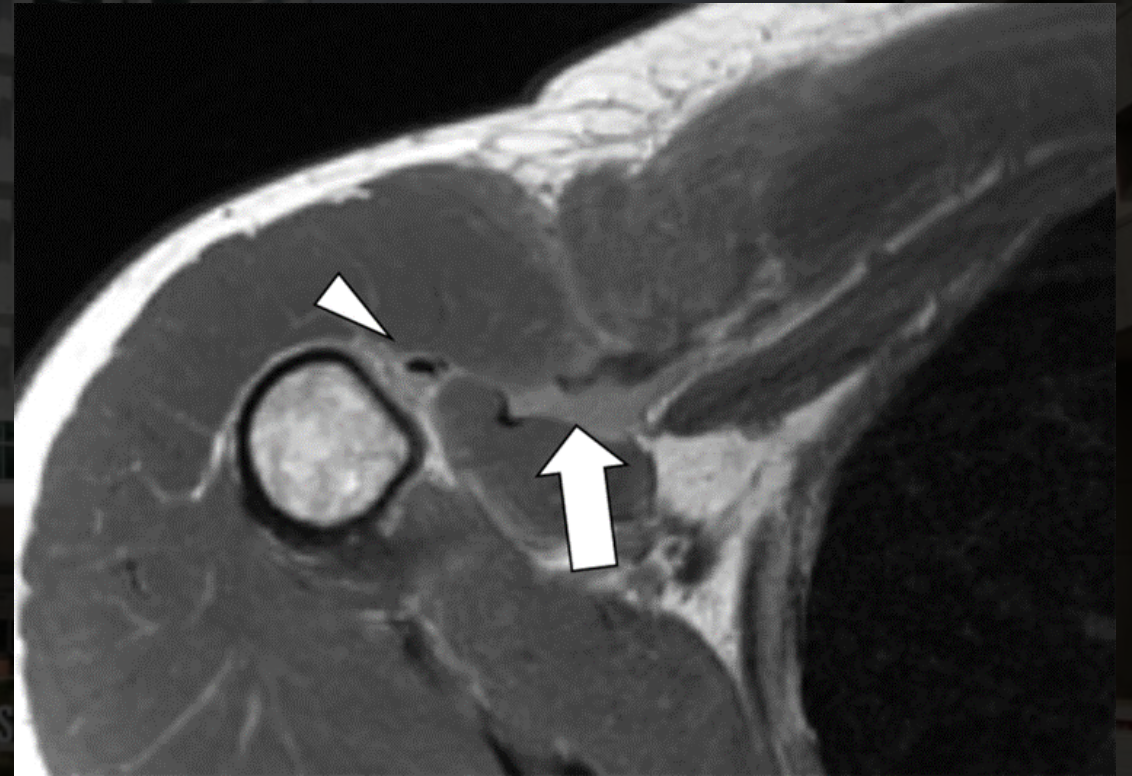
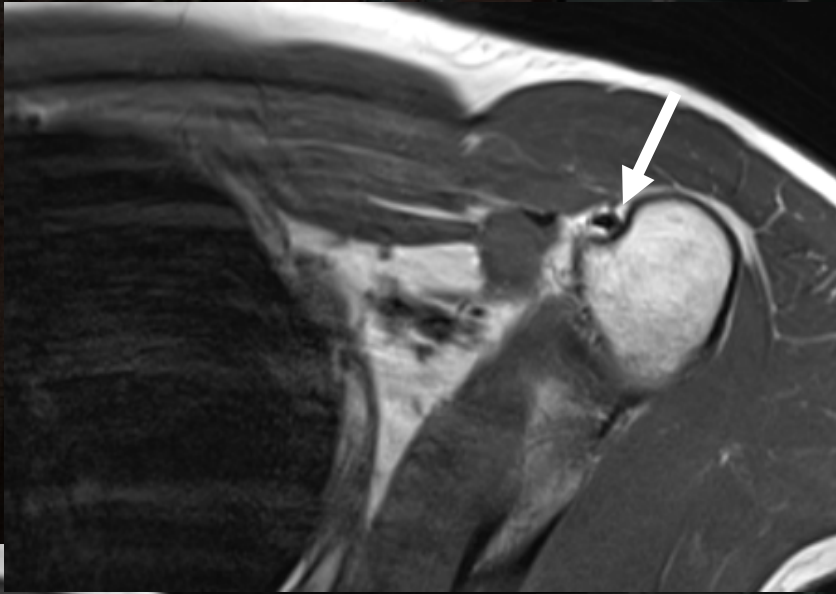
Normal Position



Medially Subluxed

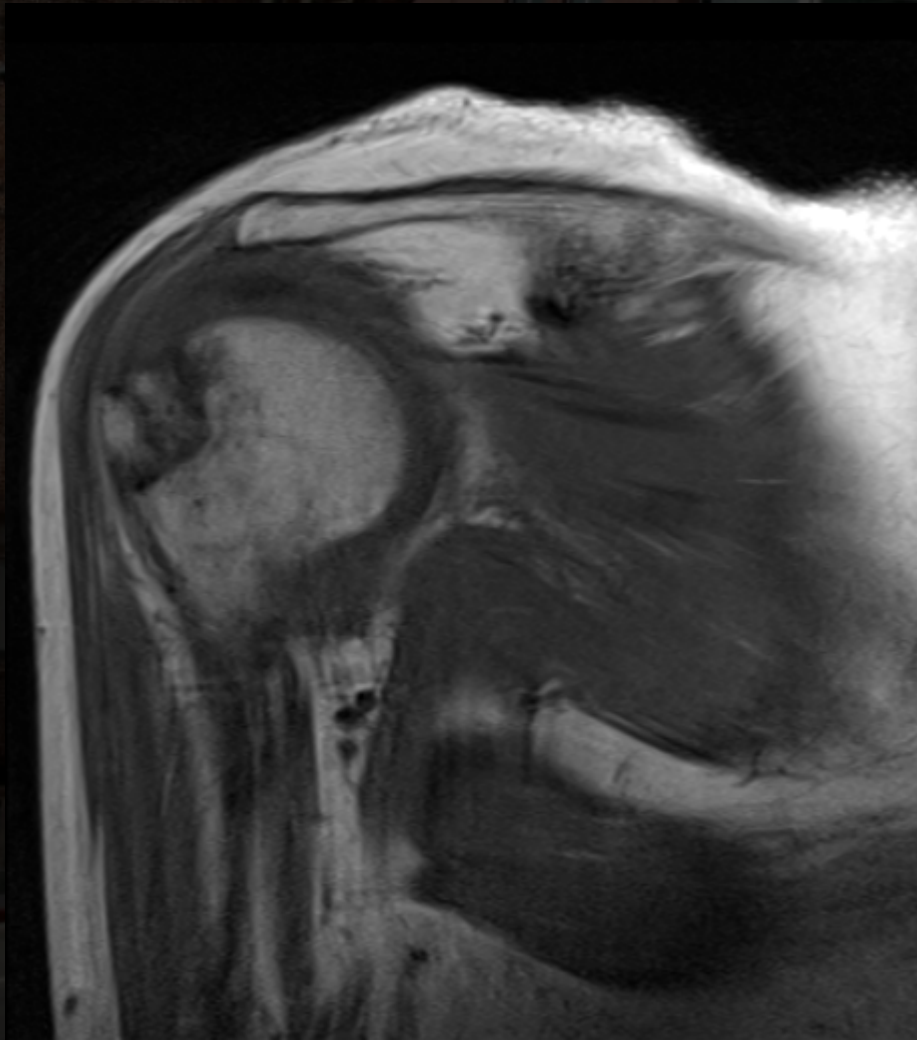
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Anterior Lifting of the Biceps Tendon

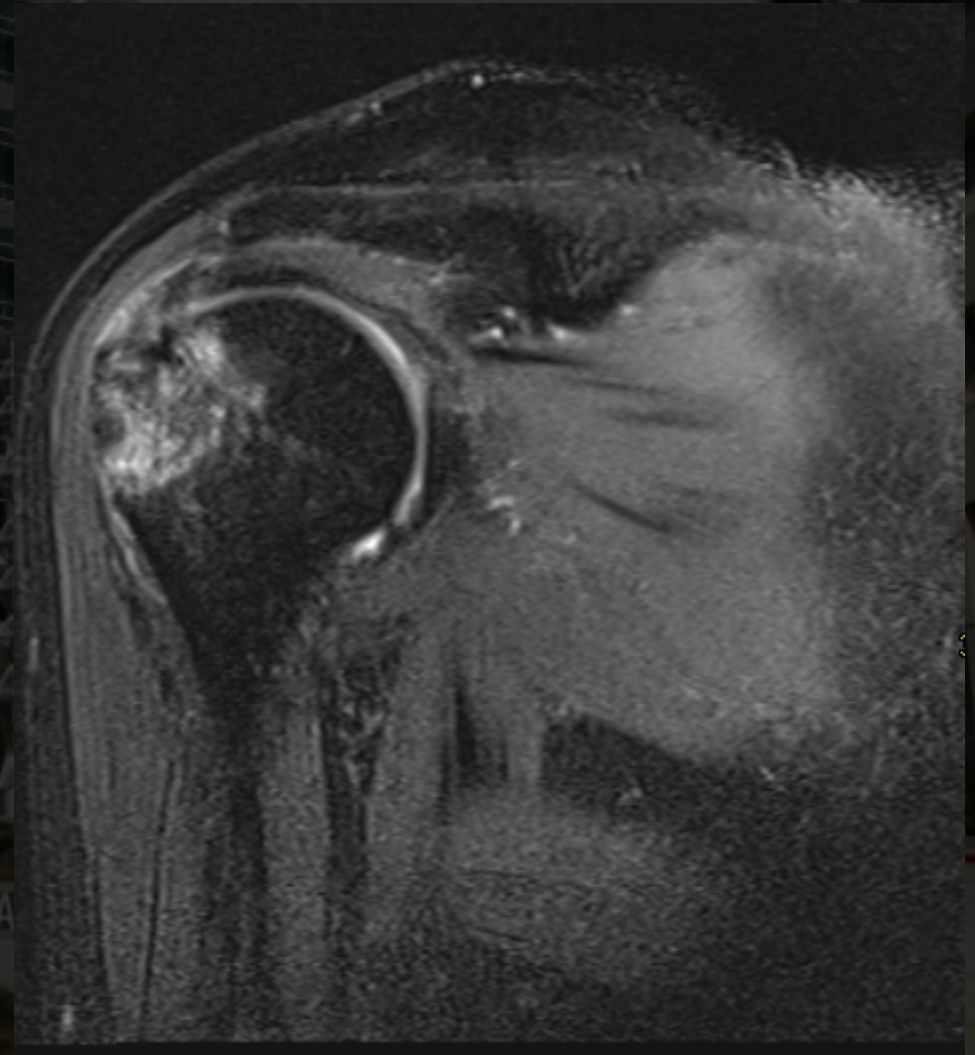


Varada SL. Published Online: March 01, 2021
<https://doi.org/10.1148/rg.2021200105>

MRI Sequences

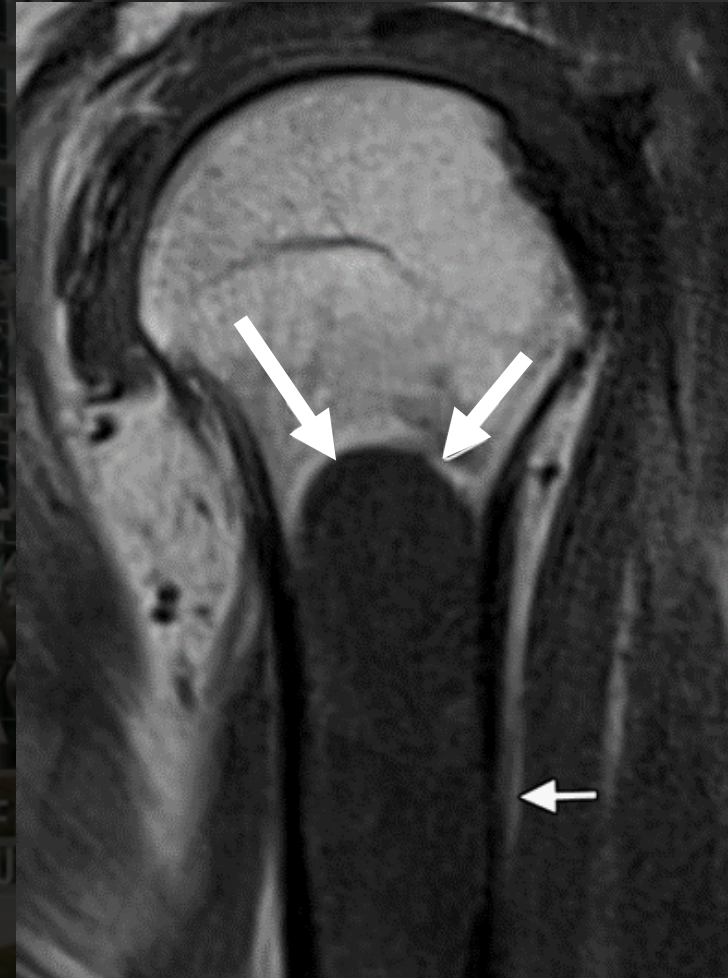
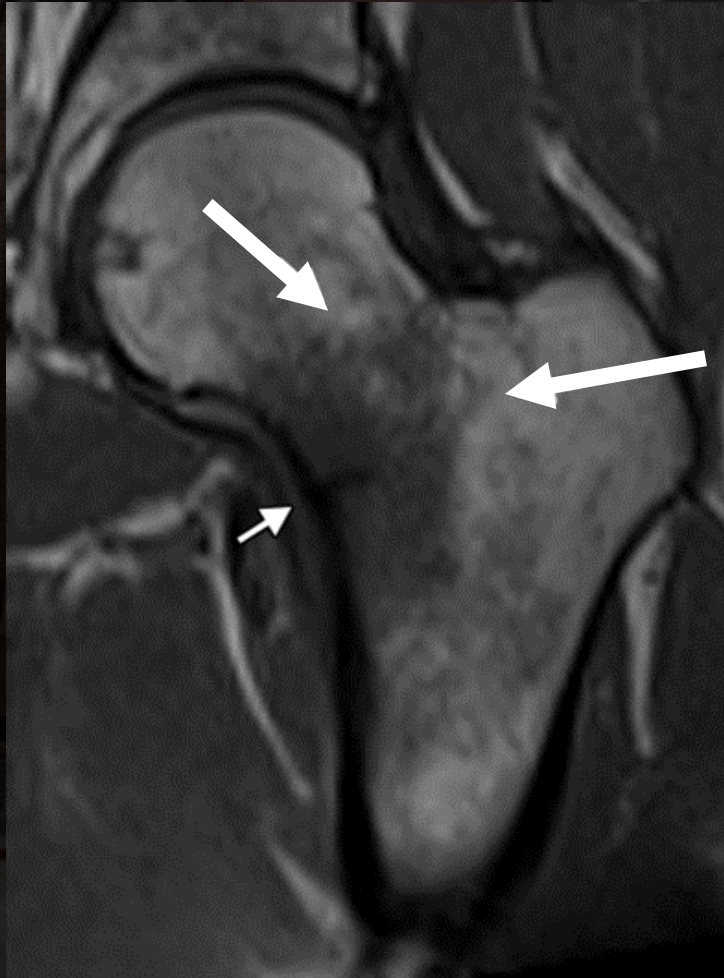


T1



T2FS

Pathologic Versus Benign Fracture



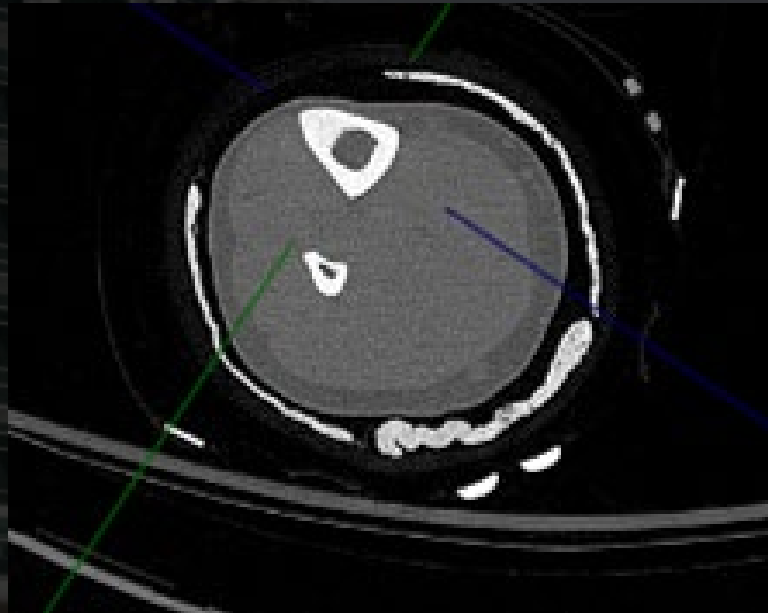
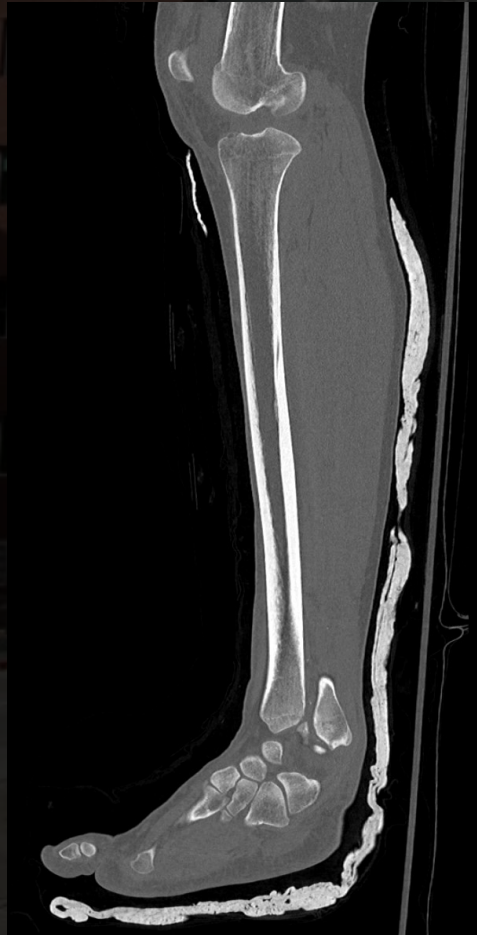
Logistical Tips and Tricks

- Imaging optimization
 - CT
 - Reconstruction planes
 - Hardware
 - MRI
 - Protocols, planes and positioning
 - Hardware

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CT reconstructions

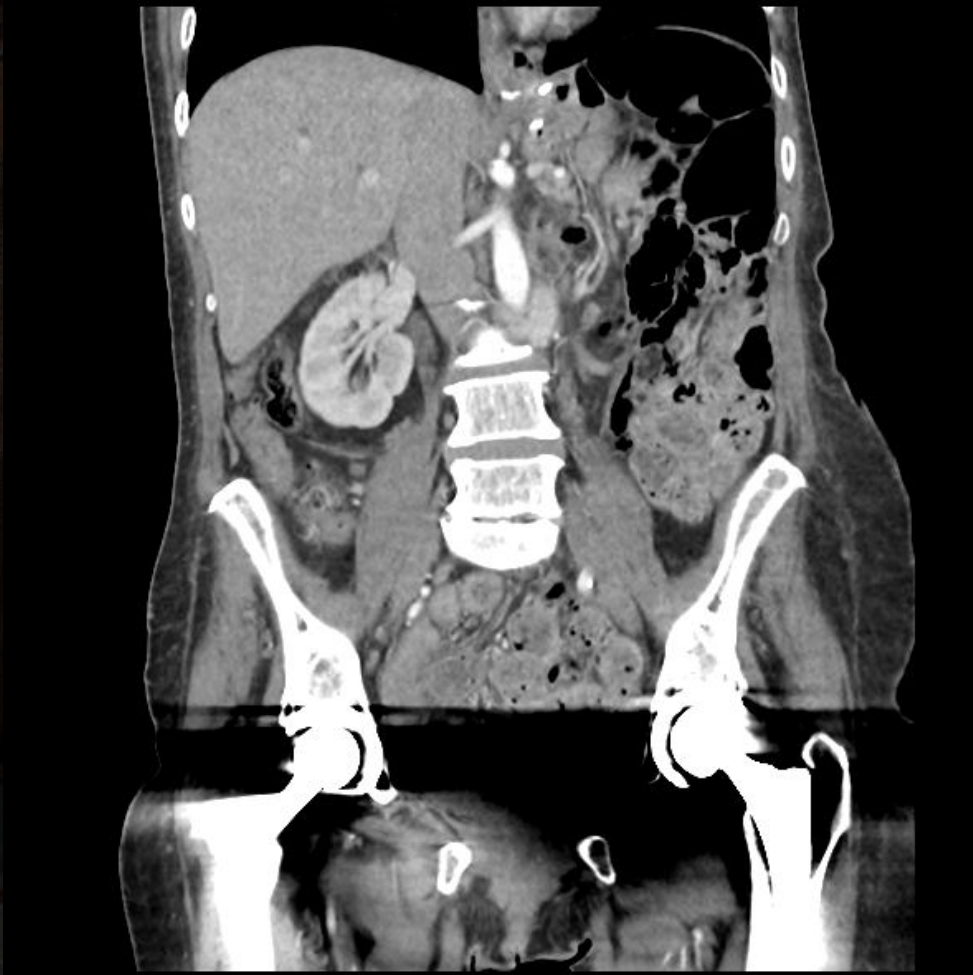


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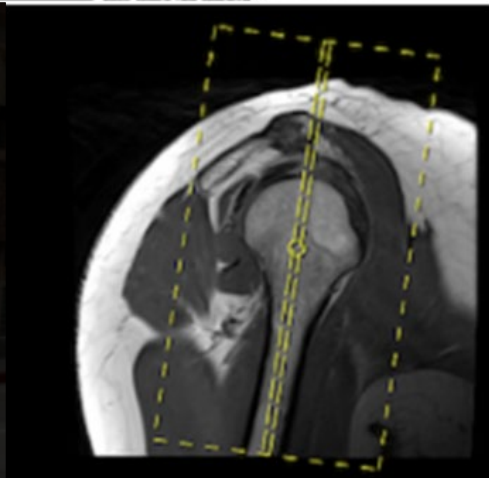
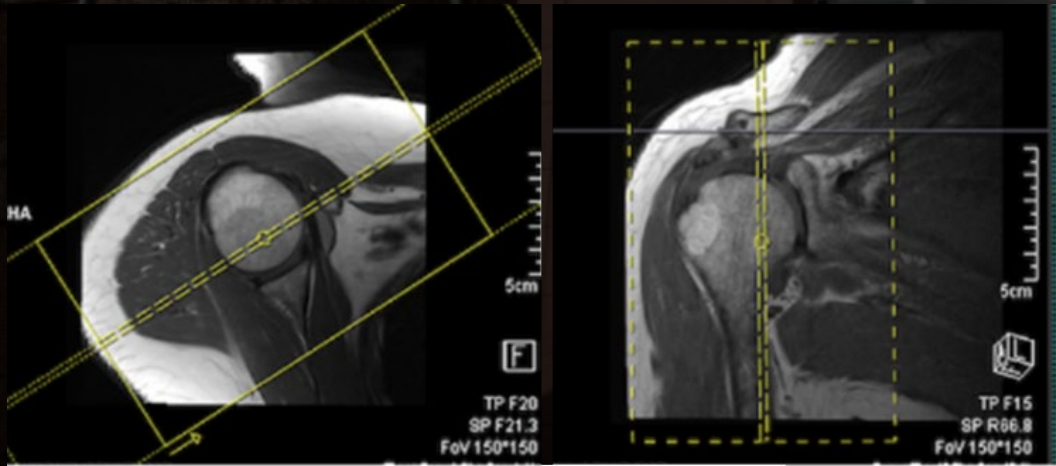
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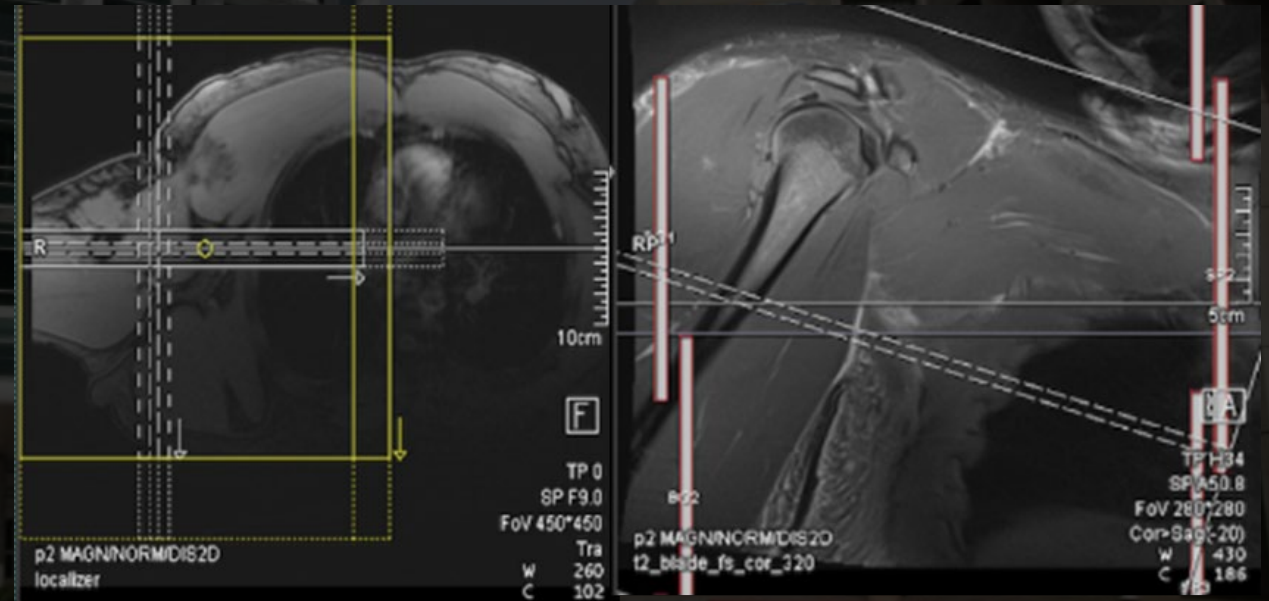
Optimization for Hardware - CT



MRI Protocols, Planes, Positioning

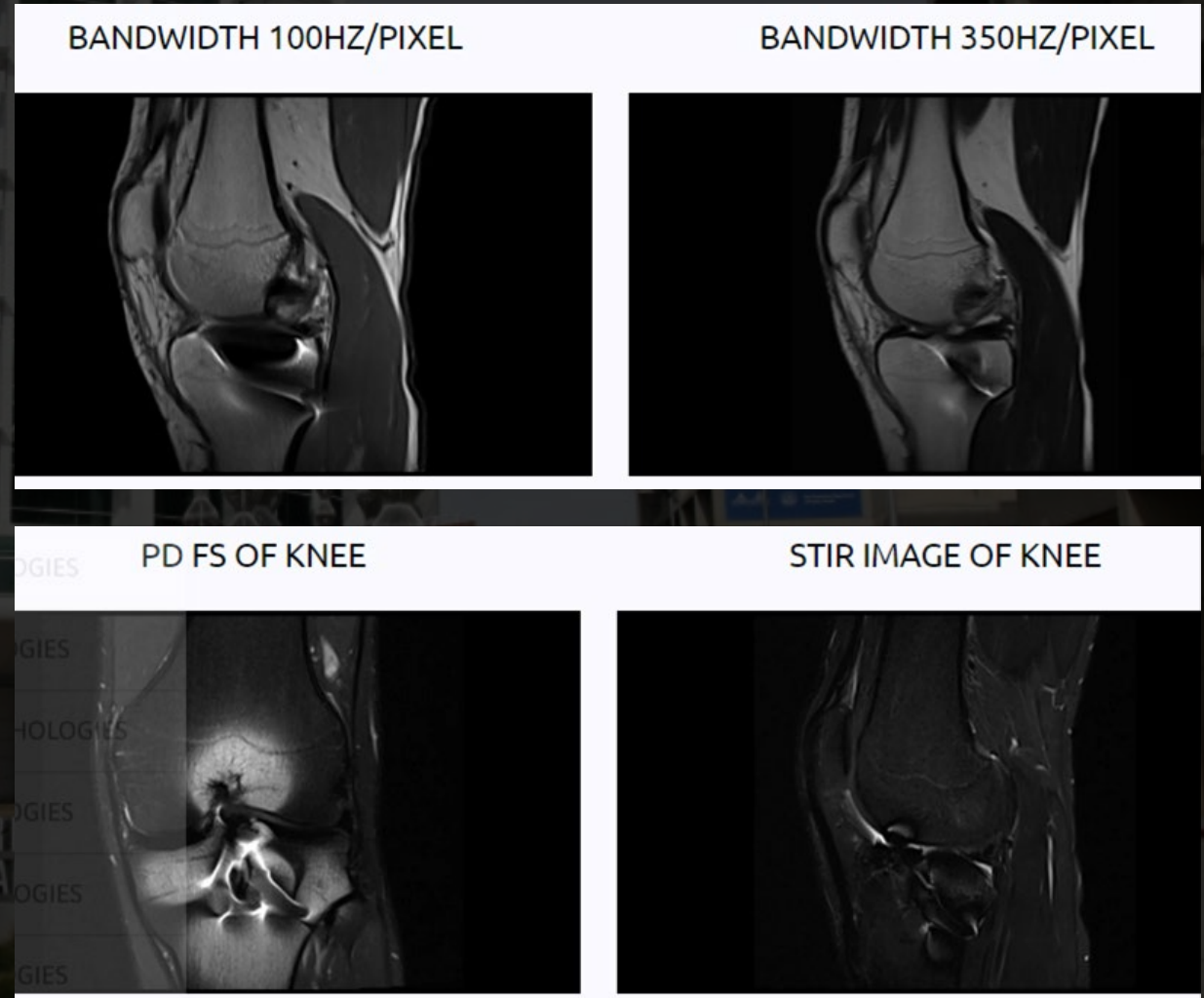
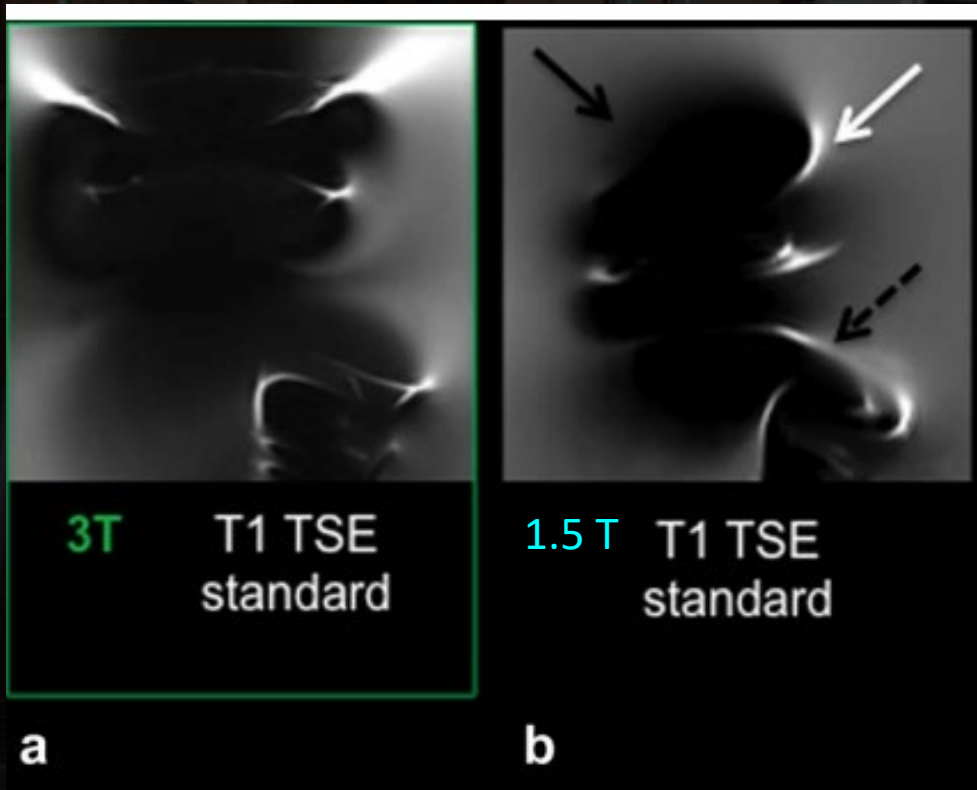


Shoulder



Pectoralis

Optimization for Hardware - MRI



Jungmann, PM. et al. Published 25 March 2017
<https://doi.org/10.1002/jmri.25708>

Thank you!

