In the name of God

Radiology in shoulder

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Traumatic shoulder pain

- Radiography
- CT
- MRI
- Sono
- Arthrography
MR-arthrography

Diagnosis of:

- 1-Labral tear in dislocation
- 2-Diagnosis of partial from full thickness cuff tears

If contraindicated: CT-arthro
CT-arthrography

Only if MRI is contraindicated

- Occult fractures
- Cuff tear
- Labral tear
Atraumatic pain:

Tendinitis & Bursitis

- Radiography
- Sono
Radiography:
- 1st modality in tendinitis and bursitis
- Shows calcium deposition

Sono:
- Needs expertise
- High sensitivity and specificity for calcium
- Echogenic focus with definite acoustic shadow
- Can be used for aspiration of calcium
Atraumatic pain:

Cuff tear & impingement

- X-ray
- Sono
- MRI
- MR-arthro
- CT-arthro
X-Ray in impingement and cuff tear
Sonography in cuff tear

- preferred initial tool

- Accuracy of Sono=MRI for tear Dx and size Dx if experienced examiner & high-quality equipment

- Sensitivity and specificity for full thickness cuff tears = 92%

- Sensitivity for partial thickness cuff tears = 67%

- Sensitivity in partial tears, very small tears, and very large tears (>3cm): low
MRI in cuff tear

- Recommended as the initial test when cuff tear or impingement is suspected
- If subacromial injection were performed, MRI should be delayed for 24 hours
- Sensitivity and specificity for full thickness cuff tears = 92%
- Partial thickness tear: Sensitivity = 64%
MR-Arthrography in cuff tear

- Recommended if cuff tear is suspected and MRI is normal
- Sensitivity and specificity for full thickness cuff tears = 95%
- Partial thickness tear: Sensitivity = 96%
CT-Arthrography for cuff tear

- Indicated if
  - 1-contraindication for MRI
  - 2-sonography expertise is not available

- Sensitivity and specificity for SSP tear > 90%
- Sensitivity for SSC tear: LOW
THANK YOU!