

**CASE 3**

**45 Y/O MAN**

# Brief history

- 45 y/o man
- PH: No major disease
- Chief complain
  - right wrist painful limitation of volar flexion off and on for more than 10 years
  - right wrist painful swelling and soft tissue mass formation over carpal tunnel for 3-4 months

# Imaging studies

- xray
- MRI of right wrist (+C)

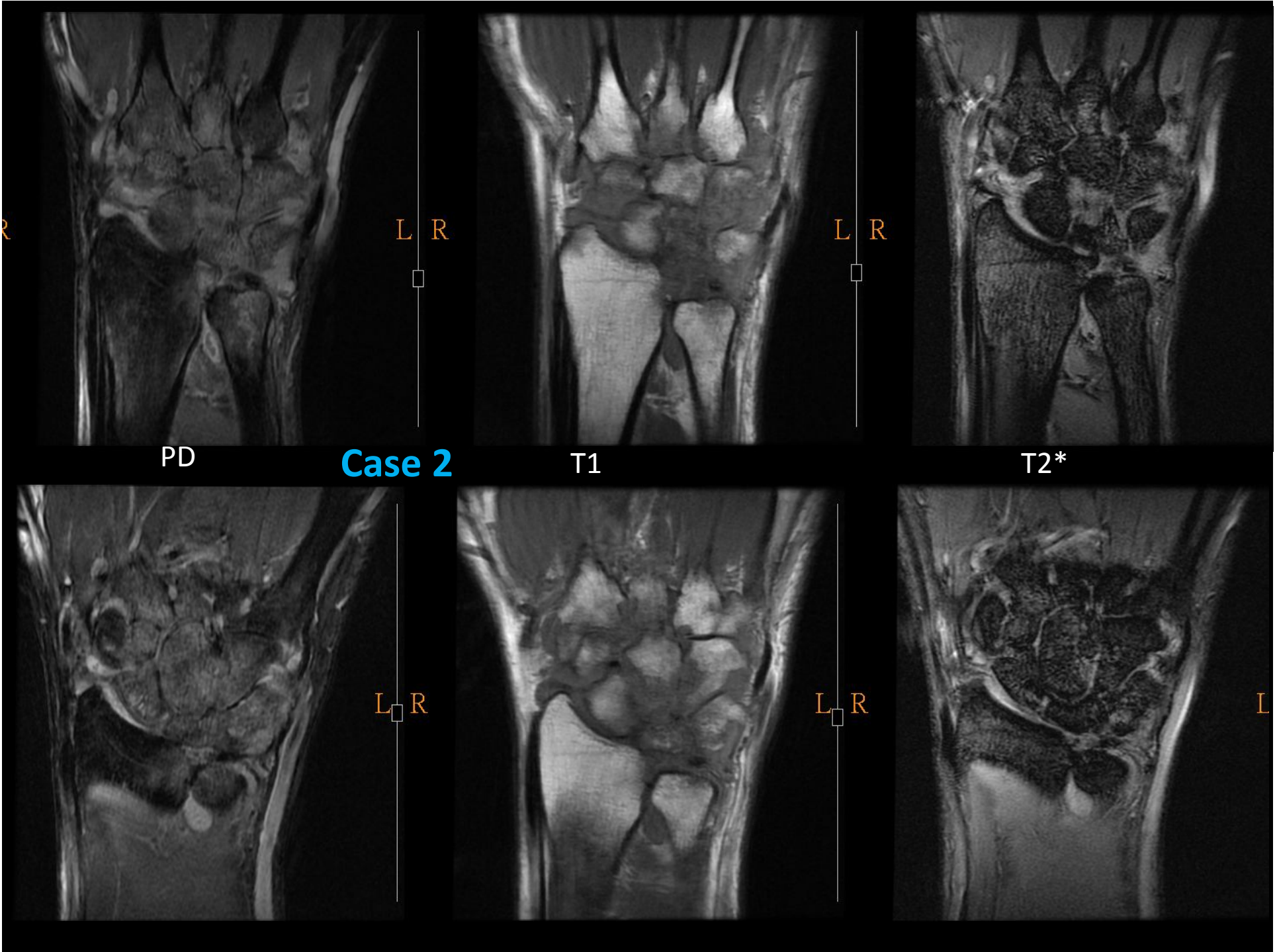
- Case 2 &3 Imaging review

**Case 2**



**Case 3**





PD

Case 2

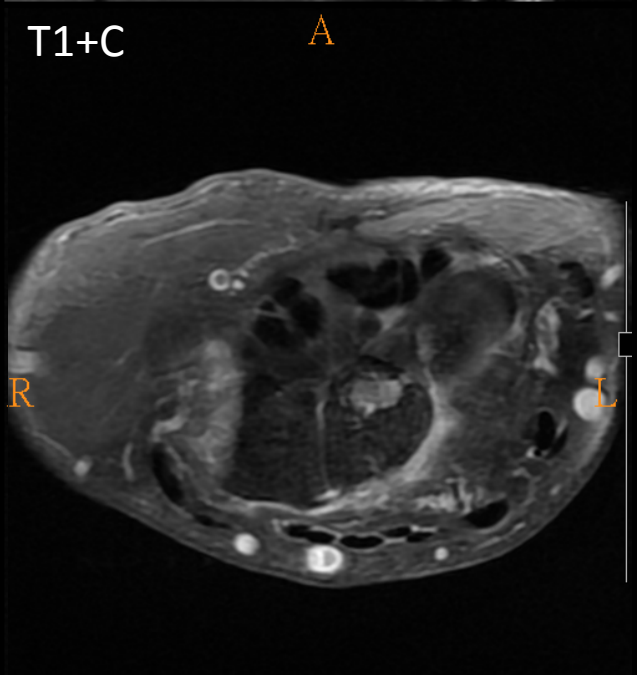
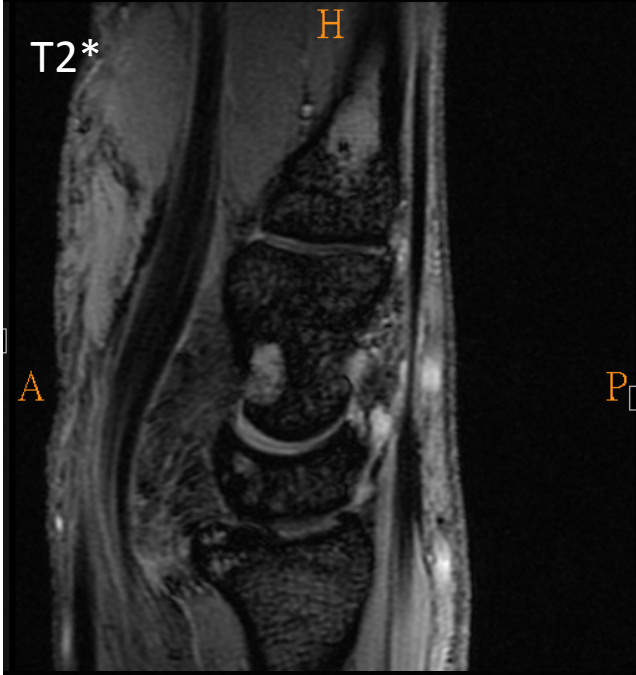
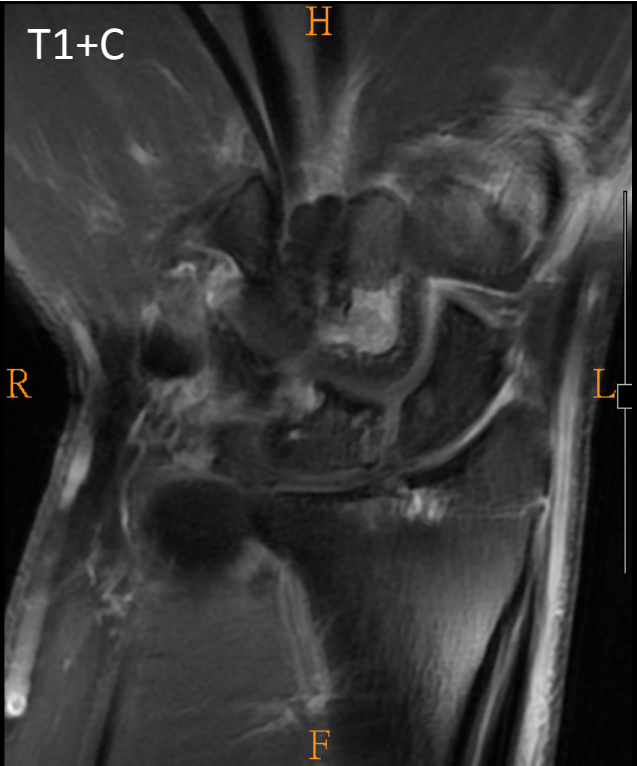
T1

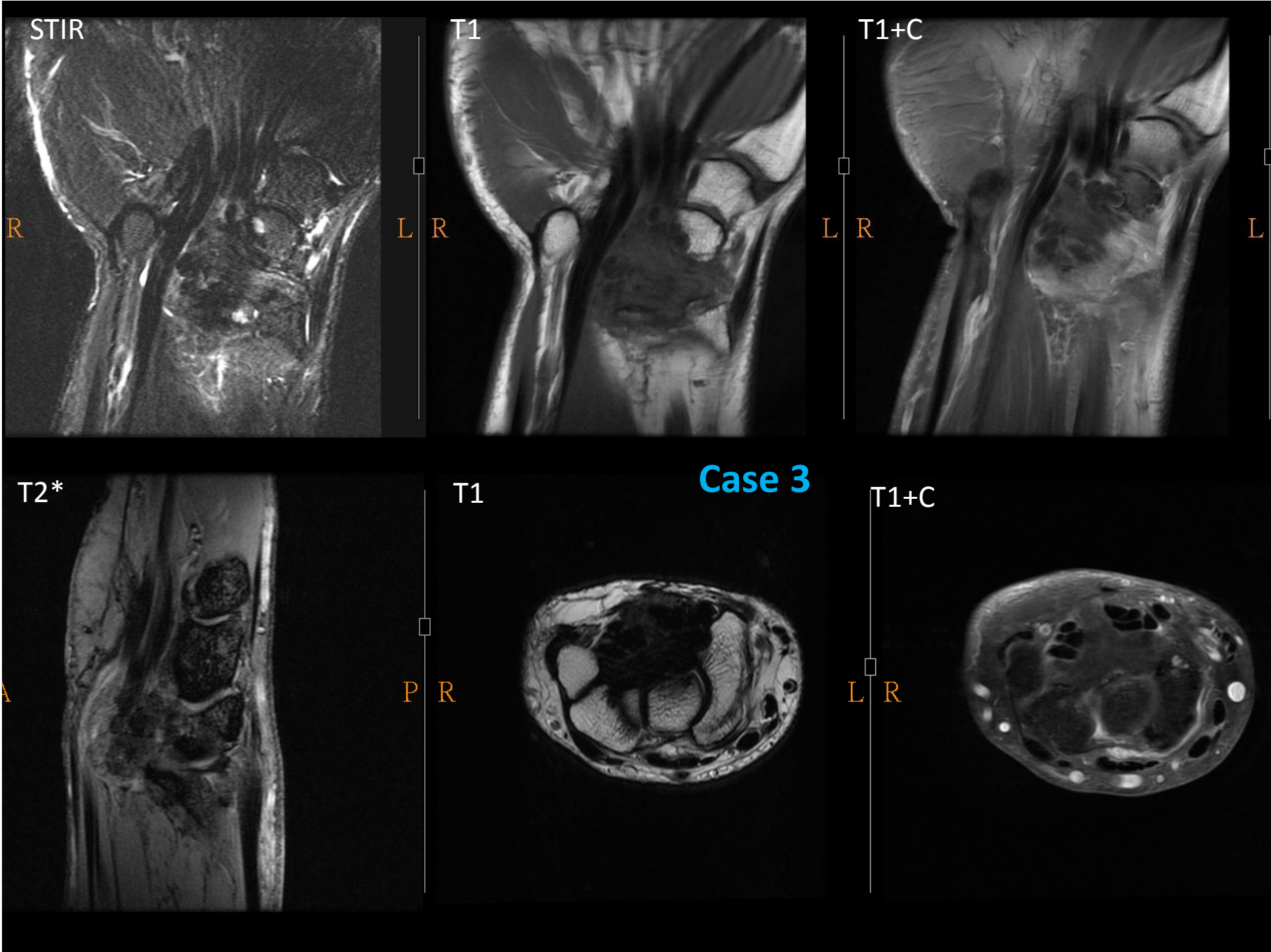
T2\*

L R

L R

L

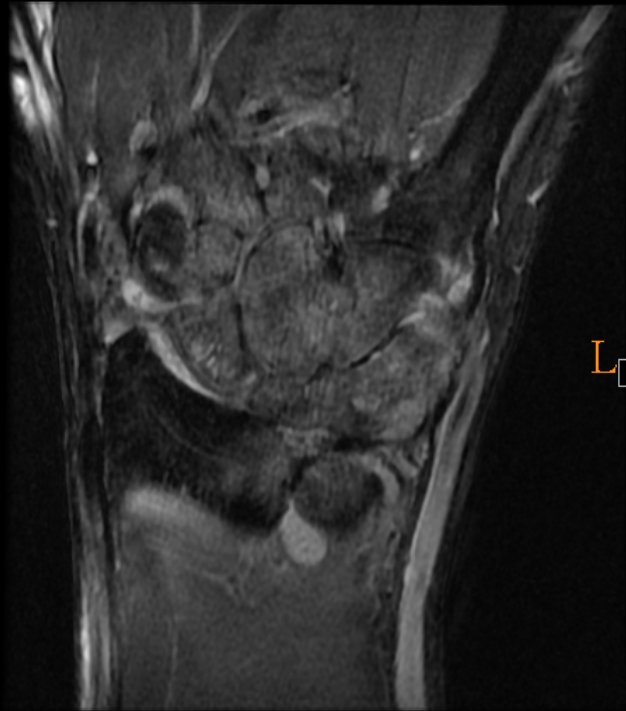






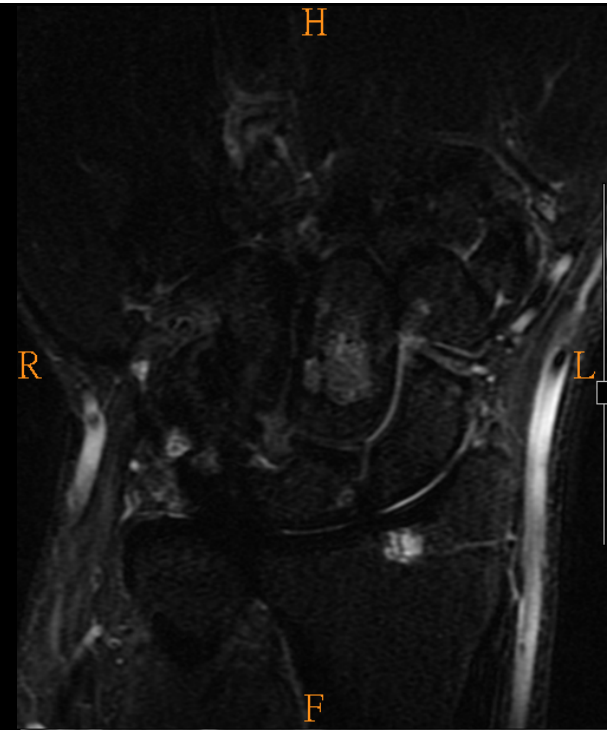
**Case 2**

PD

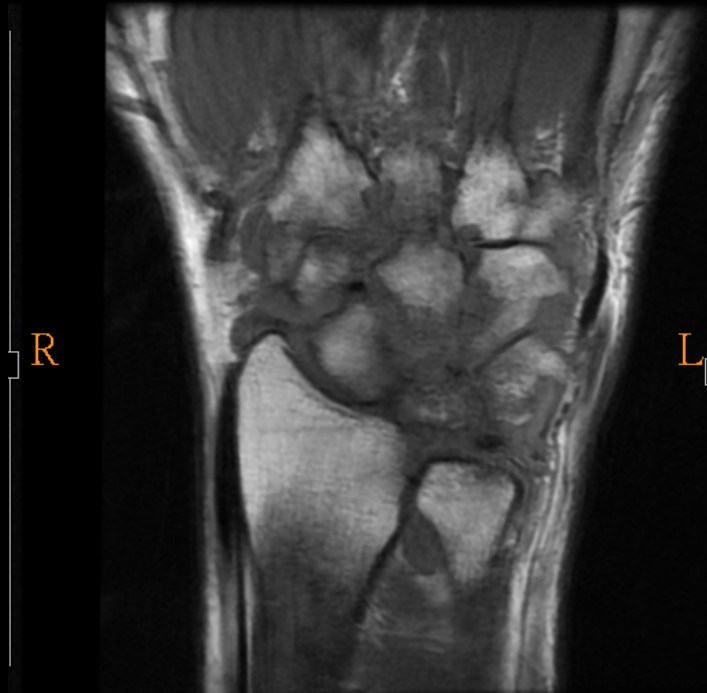


**Case 3**

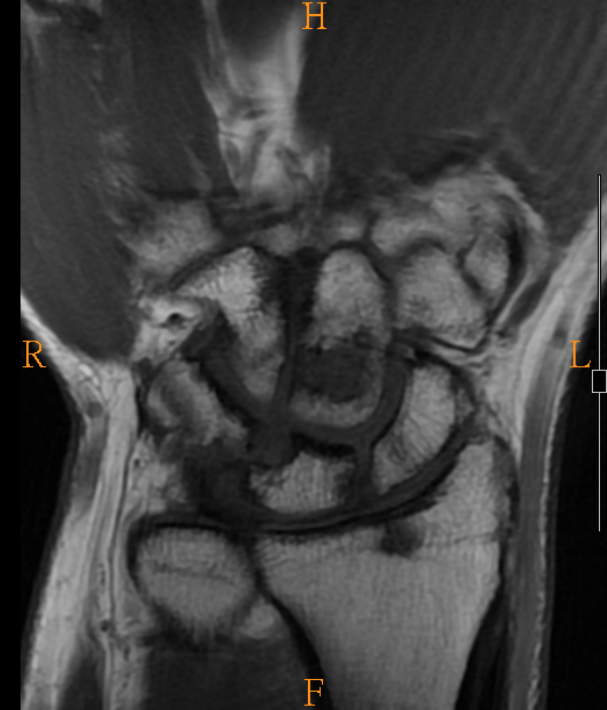
STIR



T1



T1



# DDx:

## Case 2

- Rheumatoid arthritis
- TB arthritis
- Gout

## Case 3

- Gout
- Rheumatoid arthritis
- TB arthritis

# Rheumatoid arthritis

- Location
  - MCP, PIP, Wrist
  - DIP and 1st carpometacarpal (CMC) joints not involved until end stage
- Erosions

# TB arthritis

- Monoarticular disease
- Location
  - Spine 50% (Pott Disease)
  - 2<sup>nd</sup> most common: TB arthropathy. Weight bearing joint more common (Hip, knee)
- Imaging feature
  - Phemister triad
    - Juxtaarticular osteoporosis 2° to reactive hyperemia
    - Peripheral erosion
    - Late joint space narrowing
  - severe subchondral erosion and destruction
  - pathological subluxation and dislocation

# Gout

- Location
  - 1st metatarsal phalangeal (MTP) most frequent site
  - Lower extremity > upper extremity
  - Small joints > large joints
  - Any musculoskeletal site can be involved
- Classic radiographic features
  - Normal bone density
  - Erosions are well circumscribed with sclerotic margins
    - overhanging edge
    - often intraarticular but classically are juxtaarticular as well
  - Tophi: Dense nodules in soft tissue
- MR characteristics of gouty tophi
  - T1: Intermediate homogeneous signal intensity
  - T2: Variable, Mixed low and high signal
  - +C: enhances with contrast

## Case 2

## Case 3

Uric acid(血液) 9.2 mg/dl [3.4-7.0]  
[尿酸]

- Symptoms improve after medication

ANA [抗細胞核抗體法]		Positive	
Speckled [抗細胞核抗體法]		1:80(+)	
*Anti-ds DNA(血液) [DNA抗體 (螢光免疫法)]			1.50 IU/mL [<10.00]
Anti-ds DNA 結果 [DNA抗體 (螢光免疫法)]			Negative
anti-Ro [可抽出的核抗體測定— Ro/La 抗體]			<0.3 U/mL [<7.0]
anti-La [可抽出的核抗體測定— Ro/La 抗體]			<0.3 U/mL [<7.0]
anti-Ro 結果 [可抽出的核抗體測定— Ro/La 抗體]			Negative
anti-La 結果 [可抽出的核抗體測定— Ro/La 抗體]			Negative
CRP (血液) [C反應性蛋白試驗— 免疫比濁法]	0.22 mg/dL [<0.5]		
RF (血液) [類風濕性關節炎因子試驗— 免疫比濁法]	<10.0 IU/mL [<14.0]		