



# 14 year old male with elbow pain after playing sports

Ted Su



Lossy Compression 6:1



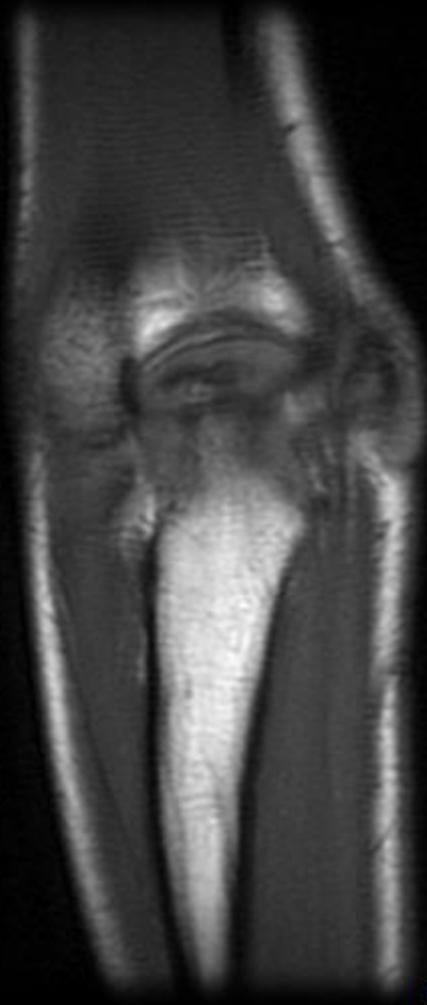
Lossy Compression 6:1



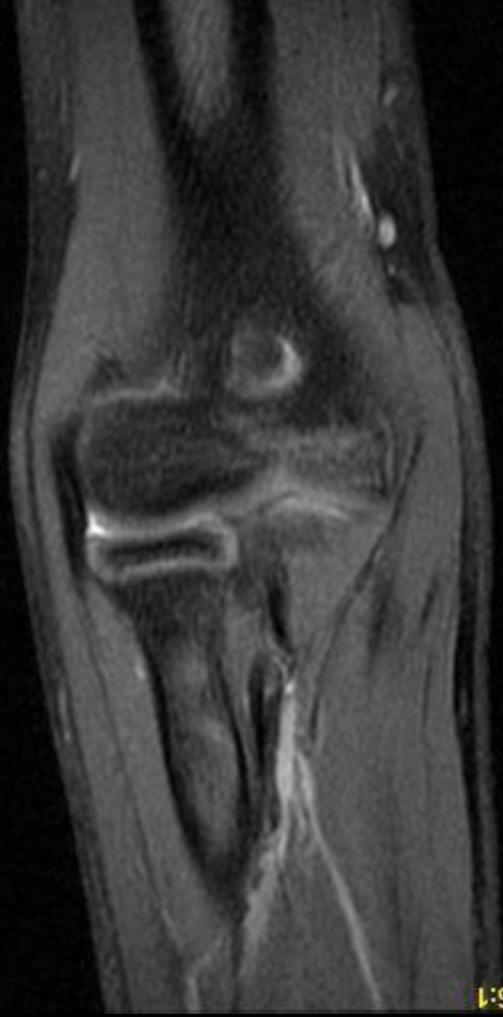
Lossy Compression 6:1



Lossy Compression 6:1



Lossy Compression 6:1



Lossy Compression 6:1



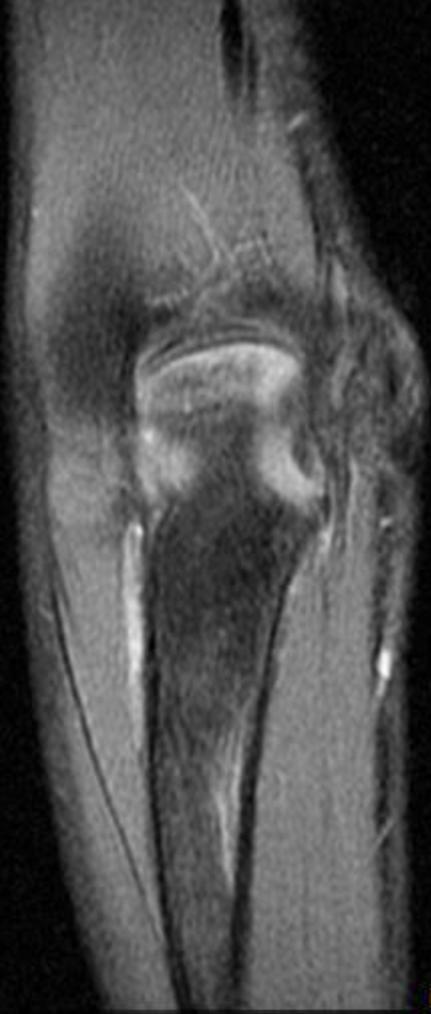
Lossy Compression 6:1



Lossy Compression 6:1

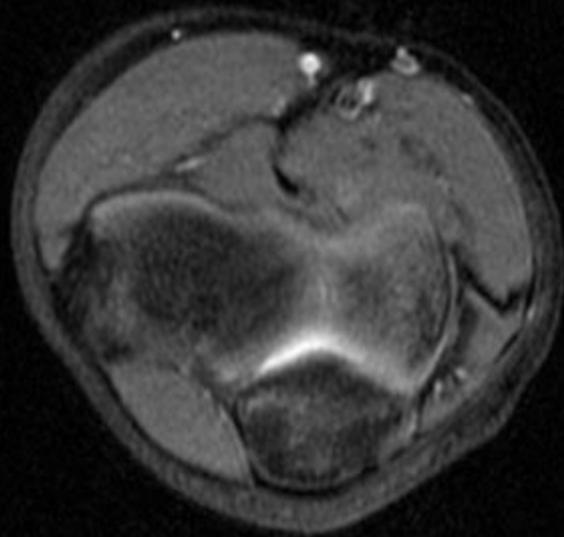


Lossy Compression 6:1

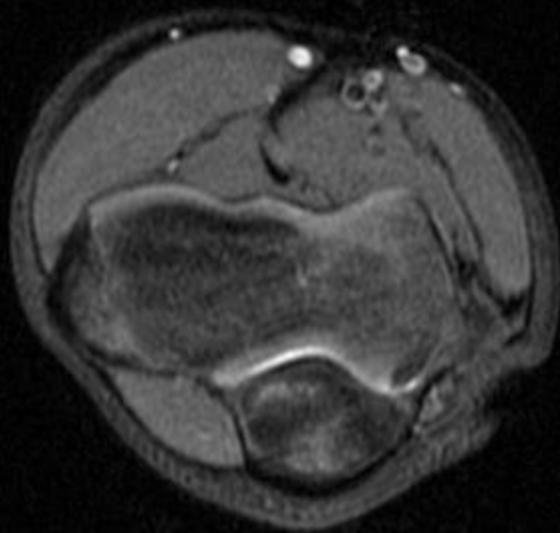


Lossy Compression 6:1

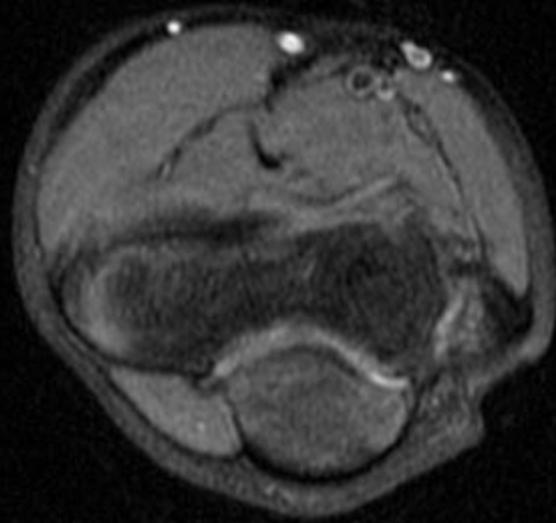
12 of 20 Lossy Compression 6:1



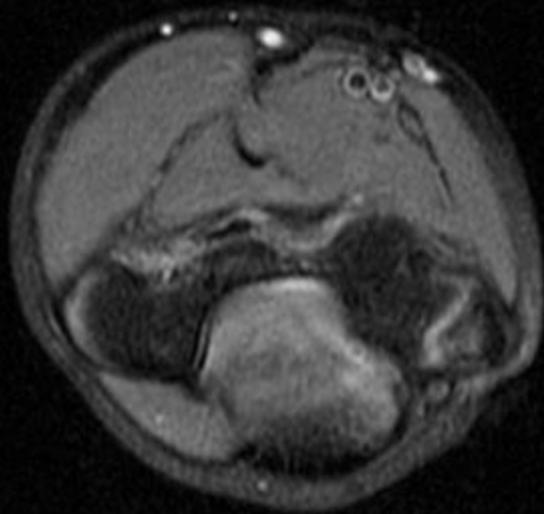
11 of 20 Lossy Compression 6:1



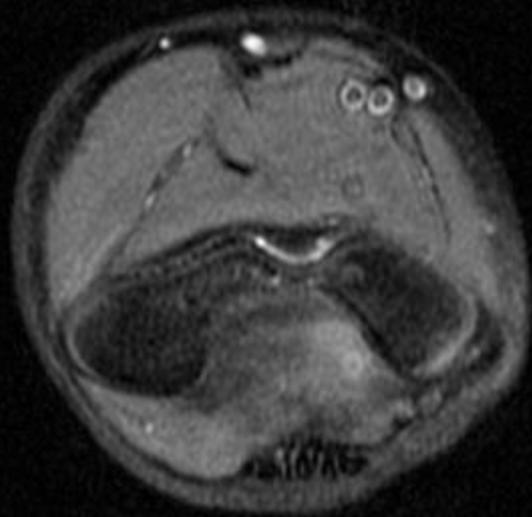
10 of 20 Lossy Compression 6:1



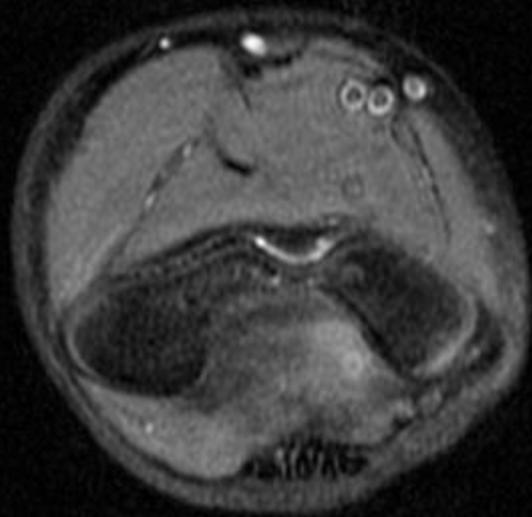
9 of 20 Lossy Compression 6:1



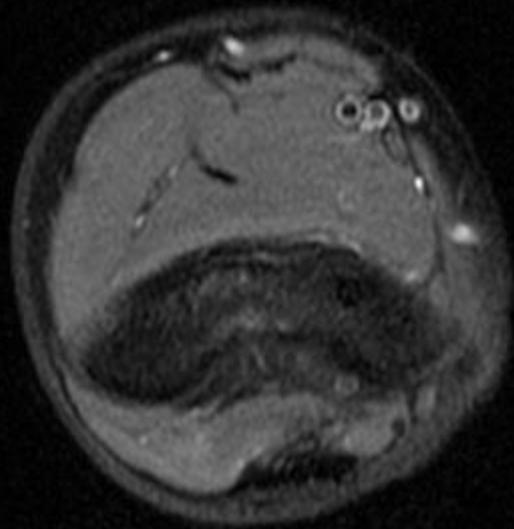
8 of 20 Lossy Compression 6:1

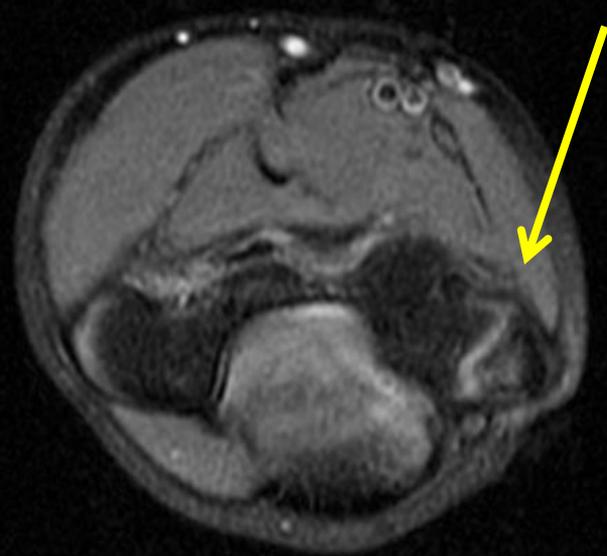


8 of 20 Lossy Compression 6:1



7 of 20 Lossy Compression 6:1





“traction apophysitis, medial epicondyle”

8 of 15 Lossy Compression 6:1



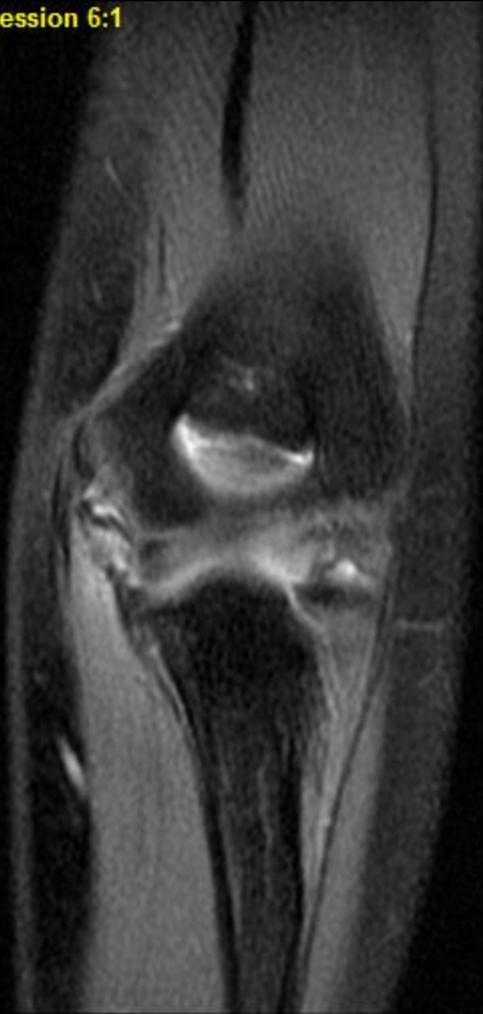
9 of 15 Lossy Compression 6:1



10 of 15 Lossy Compression 6:1



11 of 15 Lossy Compression 6:1



12 of 15 Lossy Compression 6:1



13 of 15 Lossy Compression 6:1



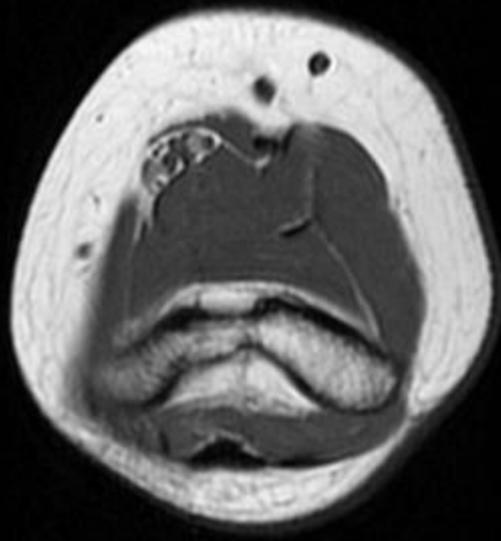
14 of 15 Lossy Compression 6:1



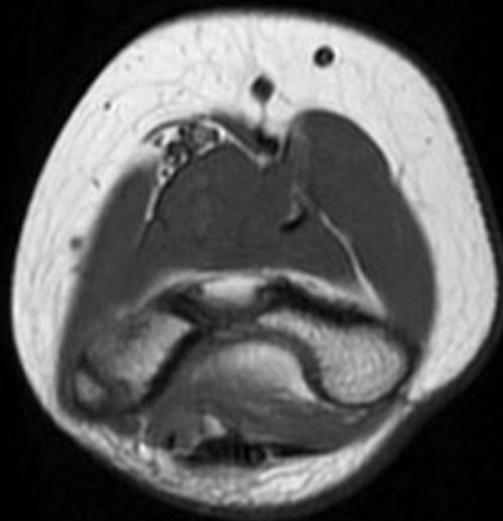
5 of 20 Lossy Compression 6:1



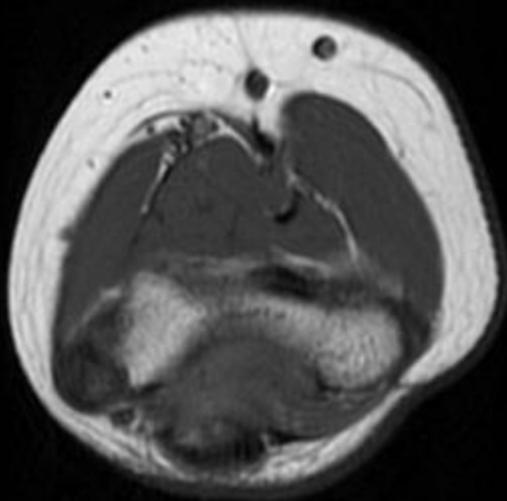
6 of 20 Lossy Compression 6:1



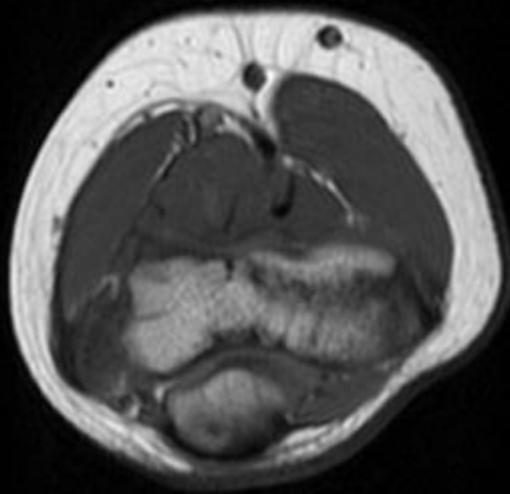
7 of 20 Lossy Compression 6:1



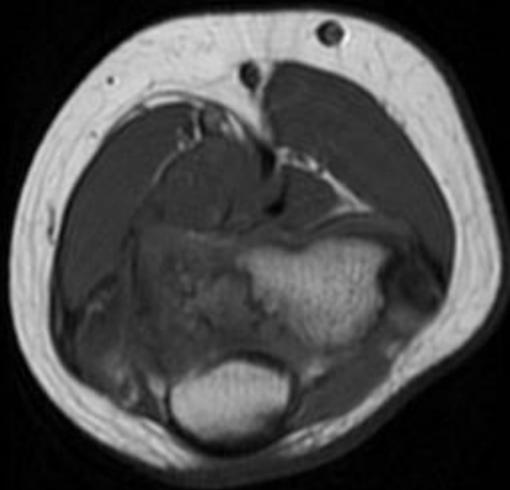
8 of 20 Lossy Compression 6:1



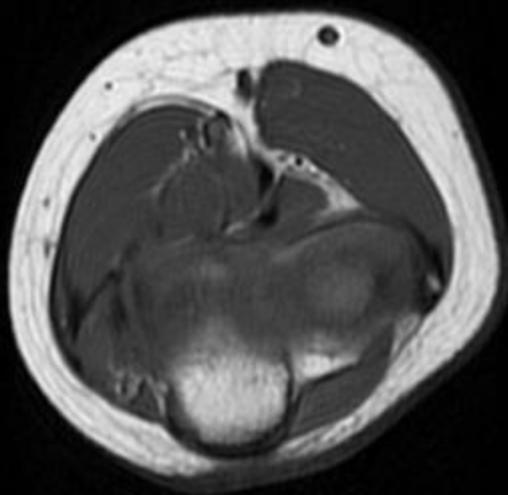
9 of 20 Lossy Compression 6:1



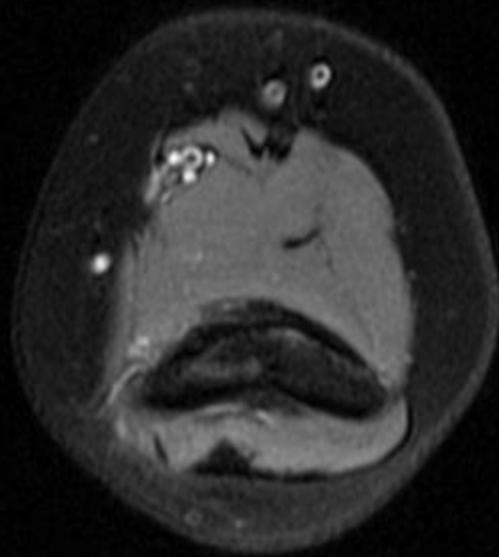
10 of 20 Lossy Compression 6:1



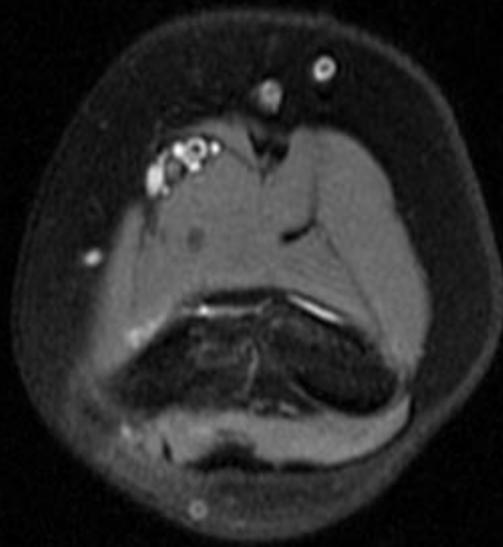
11 of 20 Lossy Compression 6:1



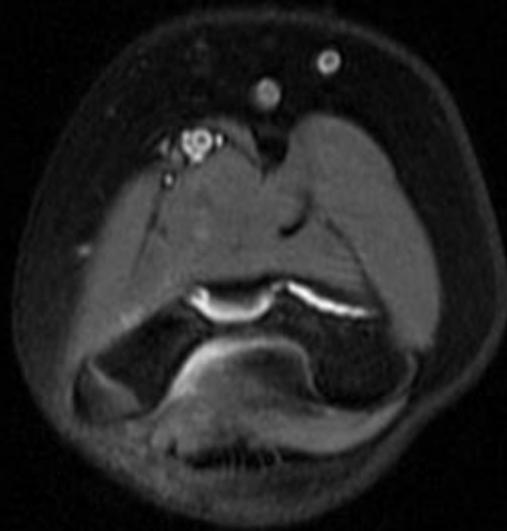
5 of 20 Lossy Compression 6:1



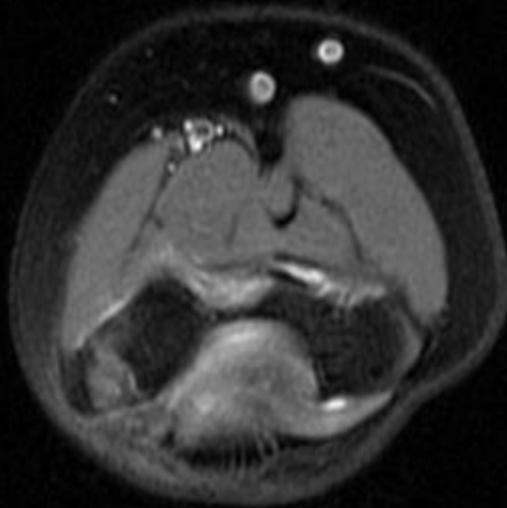
6 of 20 Lossy Compression 6:1



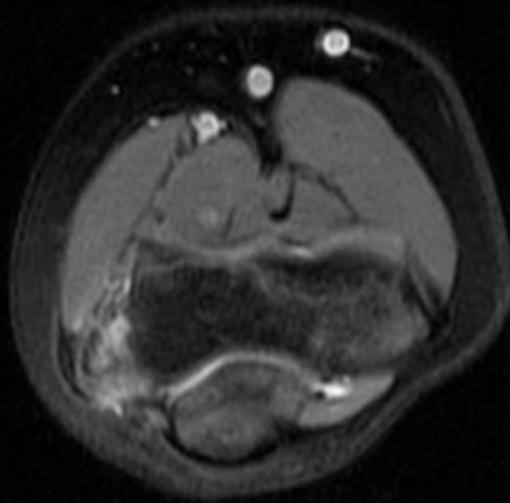
7 of 20 Lossy Compression 6:1



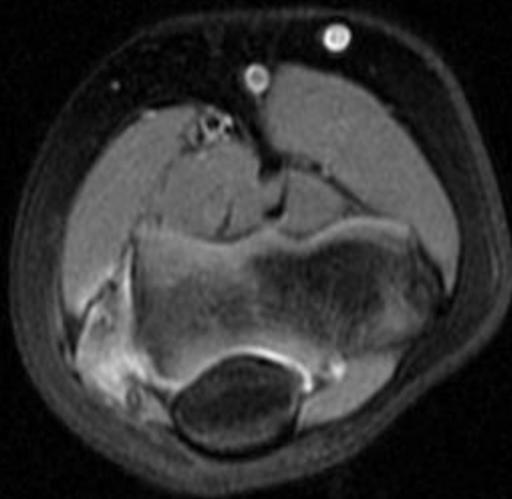
8 of 20 Lossy Compression 6:1



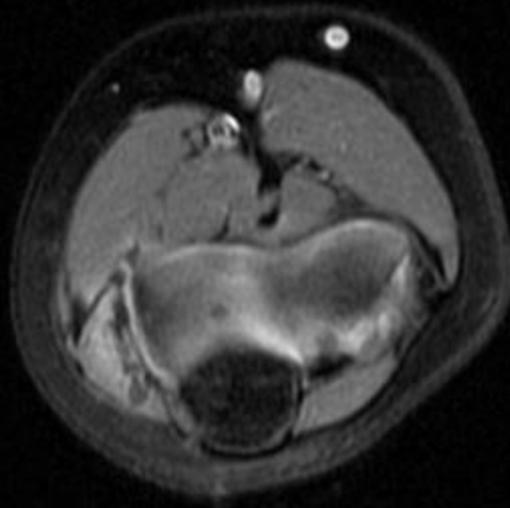
9 of 20 Lossy Compression 6:1



10 of 20 Lossy Compression 6:1



11 of 20 Lossy Compression 6:1



14 of 15 Lossy Compression 6:1



13 of 15 Lossy Compression 6:1



12 of 15 Lossy Compression 6:1



11 of 15 Lossy Compression 6:1

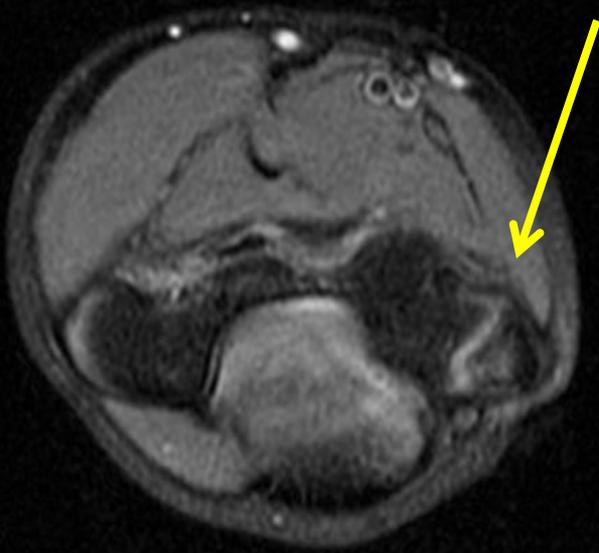


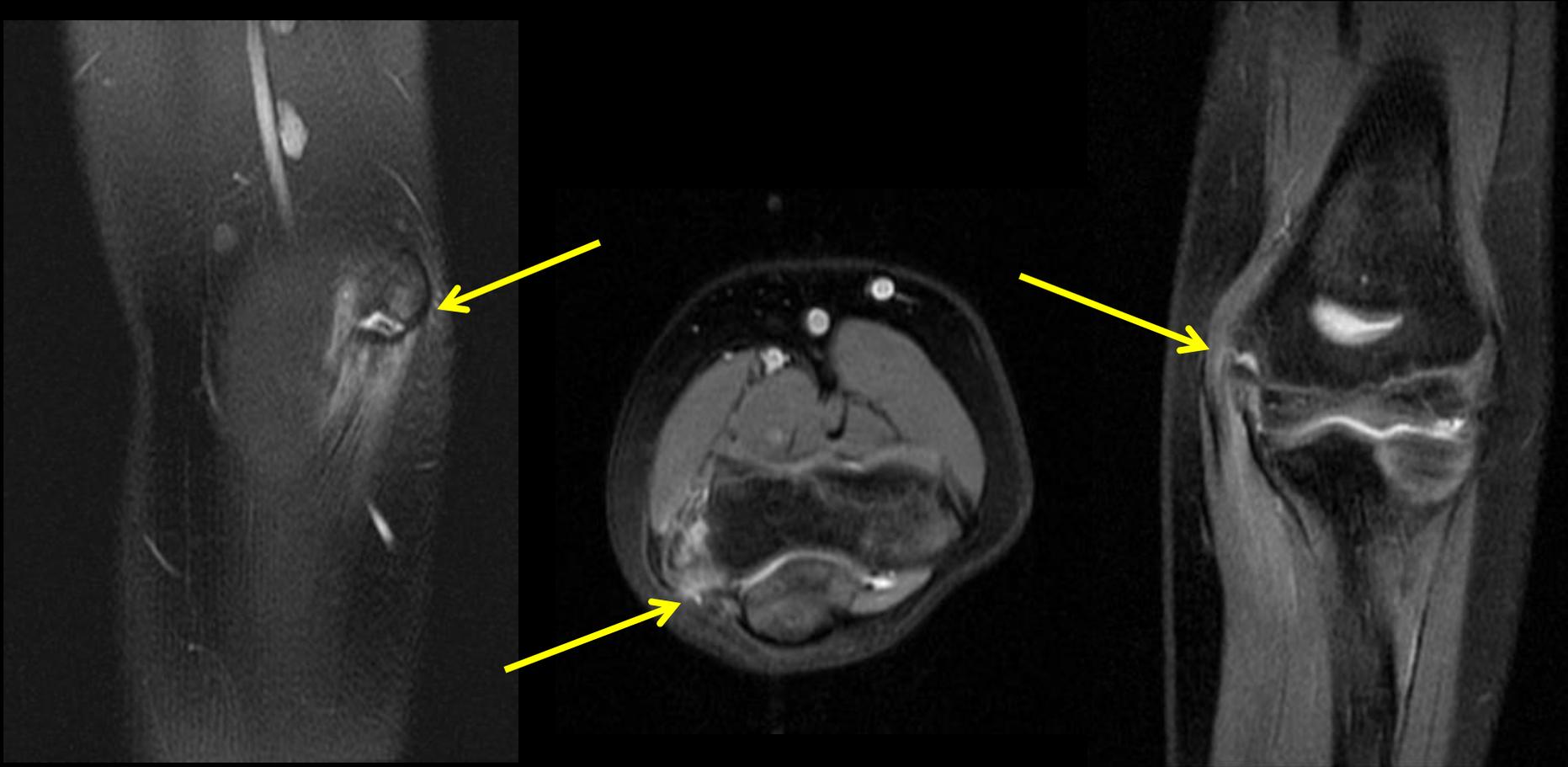
10 of 15 Lossy Compression 6:1



9 of 15 Lossy Compression 6:1







“avulsion, medial epicondyle apophysis”

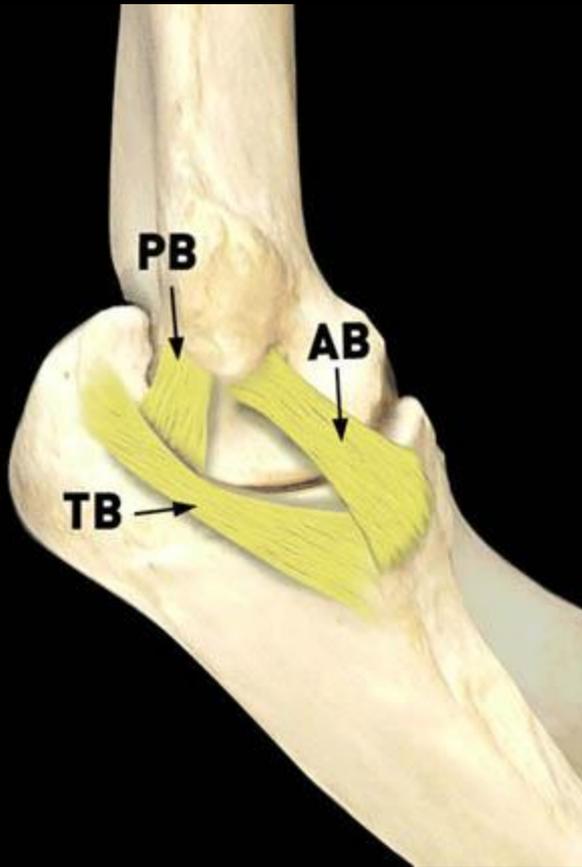
# Little Leaguer's Elbow

- Classically refers to medial epicondyle apophysitis
- But used to describe many overuse injuries including osteochondritis dissecans (OCD) of the capitellum, OCD of the trochlea, and olecranon apophysitis
- Due to repetitive microtrauma from pitching
- Acceleration phase of overhead throwing athlete imparts valgus stress
- “whipping” action puts tension on the ulnar collateral ligament (UCL)

# Little Leaguer's Elbow

- In adults this will result in UCL tears
- In children the immature apophysis is the weaker link

# Little Leaguer's Elbow



# Little Leaguer's Elbow—radiographic findings

- Initial radiograph can be normal in up to 85%
- Most common manifestation: displacement and fragmentation of medial epicondyle apophysis
- Epicondylar overgrowth from chronic traction
- Soft tissue swelling

# Little Leaguer's Elbow—MRI findings

- Marrow edema pattern, low T1, high T2
- Physis between medial epicondyle and distal humerus may be wide and hyperintense on T2
- Common flexor tendon can be thickened with increased signal on T1 and T2
- Edema may extend to proximal aspect of forearm flexor muscles

# Little Leaguer's Elbow—Panner disease

- Panner disease: AVN of the capitellum
- Lucency of capitellum with sclerosis and fragmentation
- Dominant elbow, age 5-12
- MRI—diffuse capitellar edema, morphology usu preserved



# Little Leaguer's Elbow—OCD

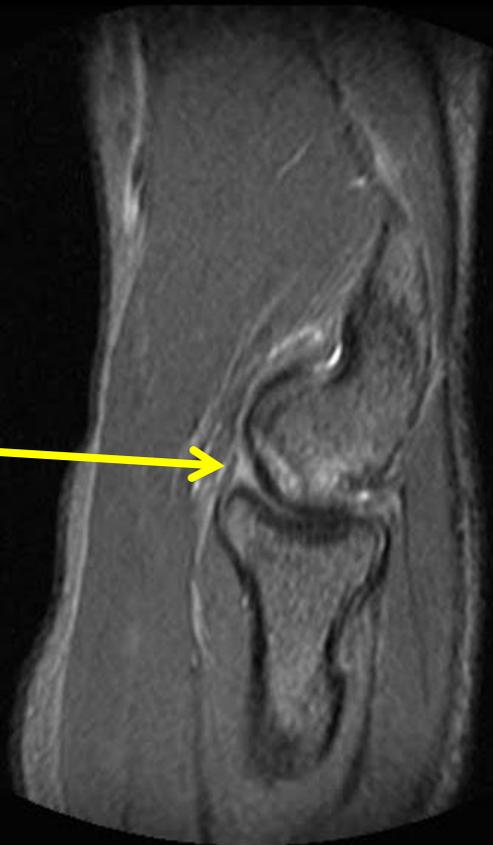
- OCD
- Starts as f
- Then lytic
- flattening
- Older, age



# Little Leaguer's Elbow—OCD

Se: MR #6  
Im: 13/18  
ET: 6  
TR: 3403.0ms  
TE: 14.4ms

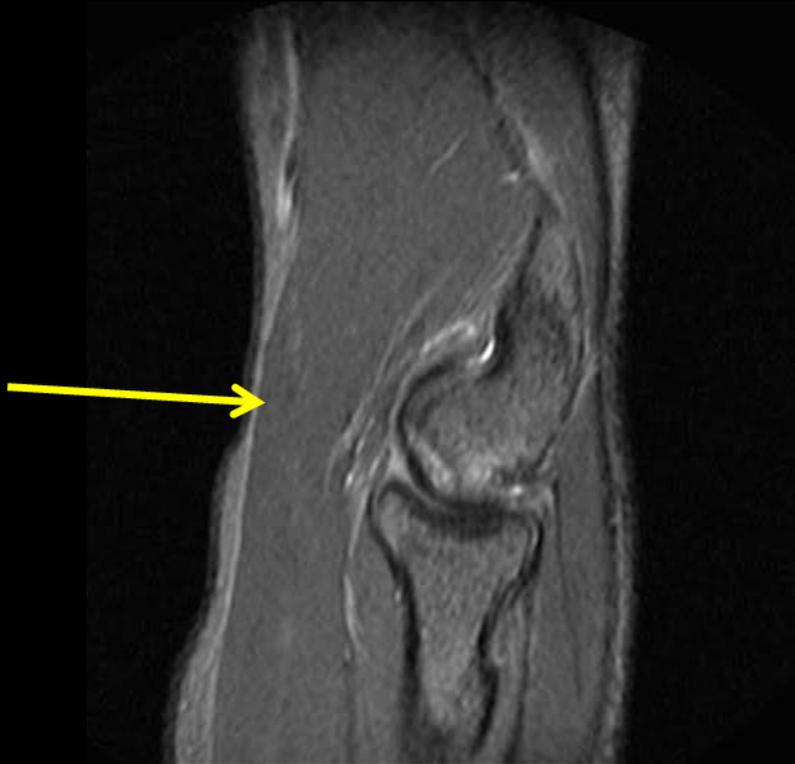
[ 68821COR ]



512x512  
Zoom: 124 %  
Compression: 6:1 (lossless)  
W: 475 L: 230

Com

# Little Leaguer's Elbow—OCD



- Don't confuse this with the normal pseudodefekt

# References

- Iyer, et al. Elbow Trauma in Children. *AJR*. 2012; 198:1053-68
- Radsource. Little League Elbow. May 2005.