Case of the day : Case 4 - MSK

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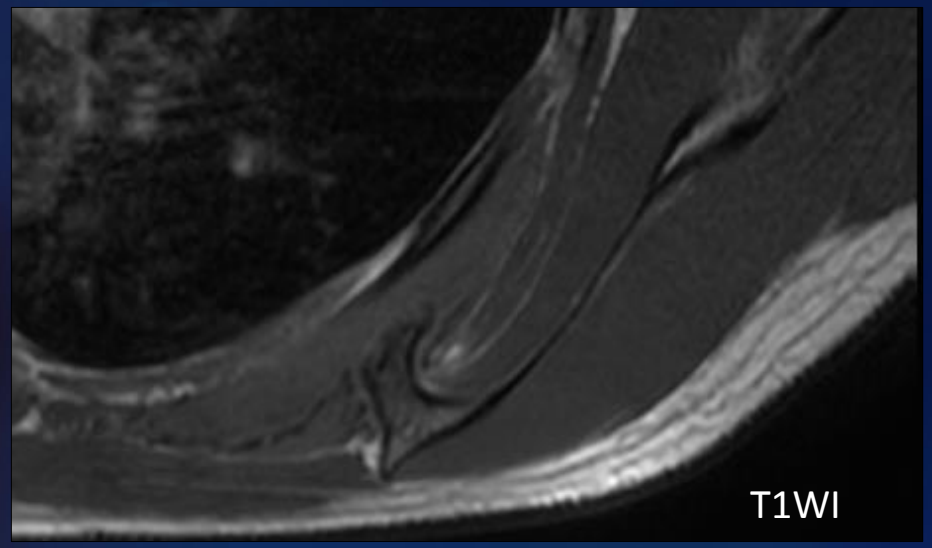

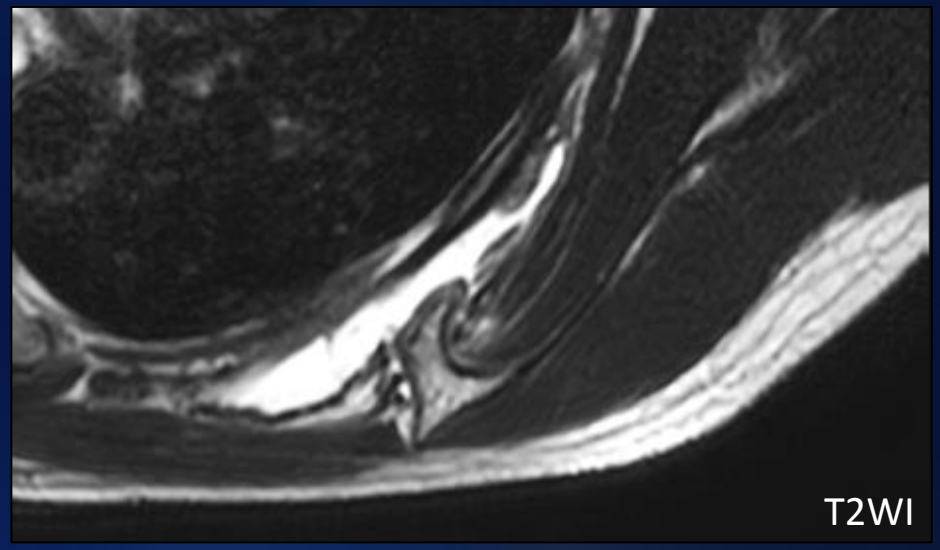

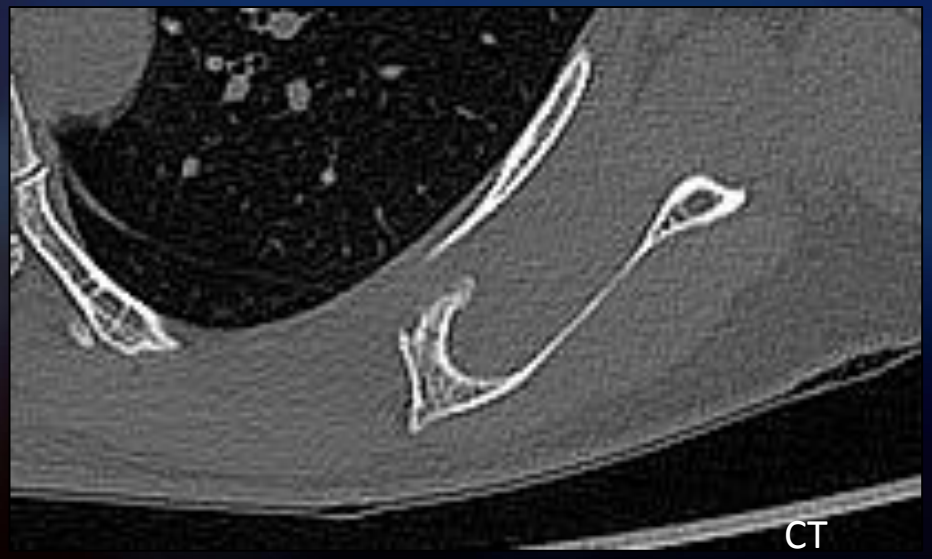

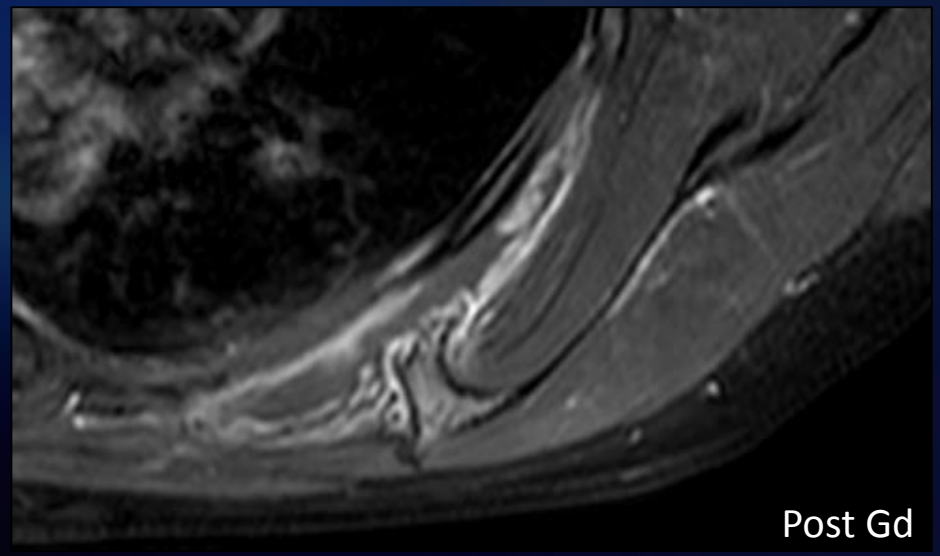

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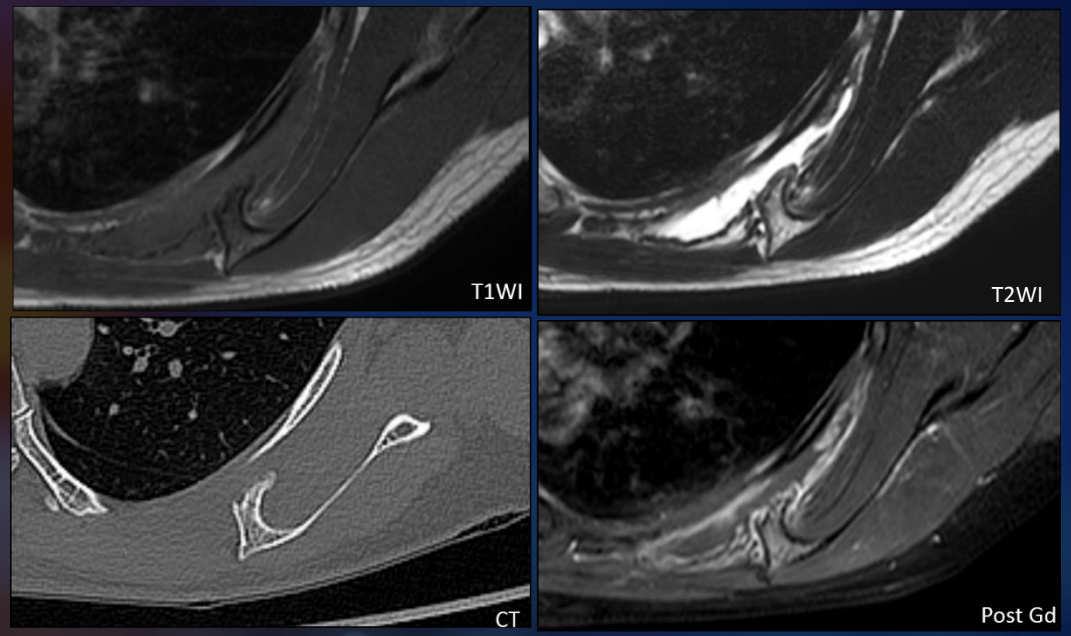
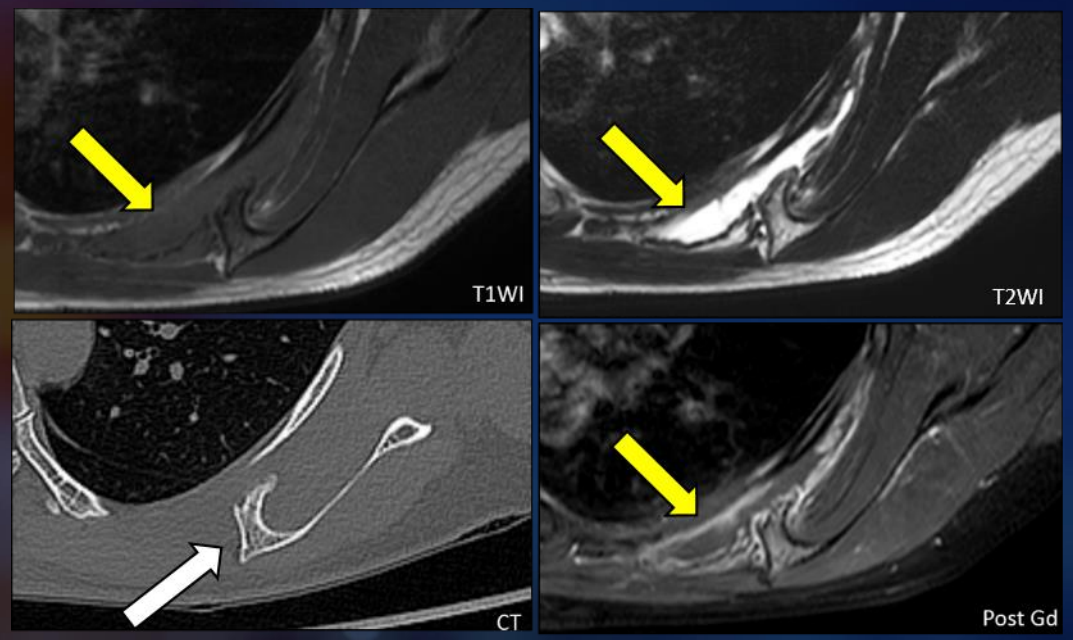


- What is the most likely diagnosis?

A. Osteochondroma
B. Scapulothoracic bursa
C. Secondary chondrosarcoma
D. Exostosis fracture with hematoma
E. Osteochondroma with exotosis bursata

FINDINGS



- Bony protuberance from ventral surface of scapula with continuity of cortex and medulla → osteochondroma or exostosis
- Fluid signal intensity lesion with peripheral enhancement overlying exostosis and located between serratus anterior muscle and chest wall

Diagnosis

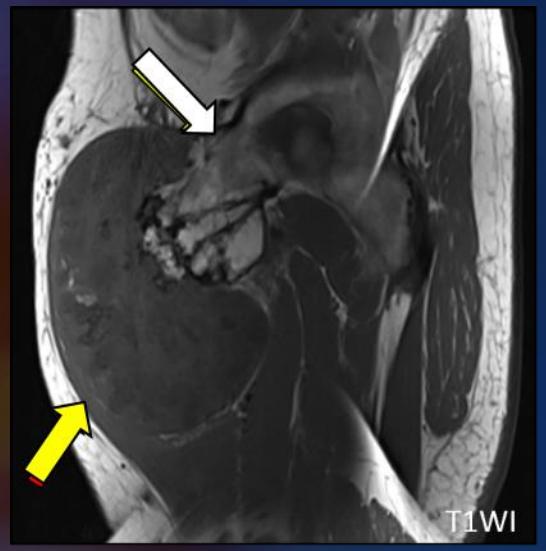
- Osteochondroma with exostosis bursata

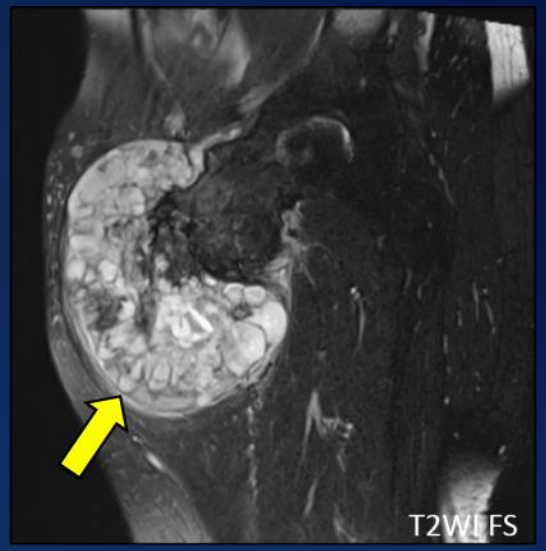
Point of Learning : Exostosis bursata

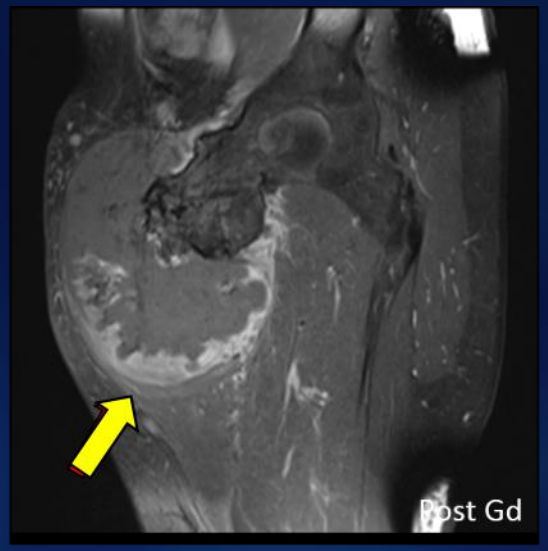
- Complication occurred in 1.5 %
- Related to sites with motion
- Common location: scapula (m/c), lesser trochanter of hip, and shoulder
- Bursa are lined by synovium may become inflamed, infected, hemorrhage and may contain chondral or fibrin bodies and can developed secondary synovial chondromatosis.
- Important to differential from malignant transformation

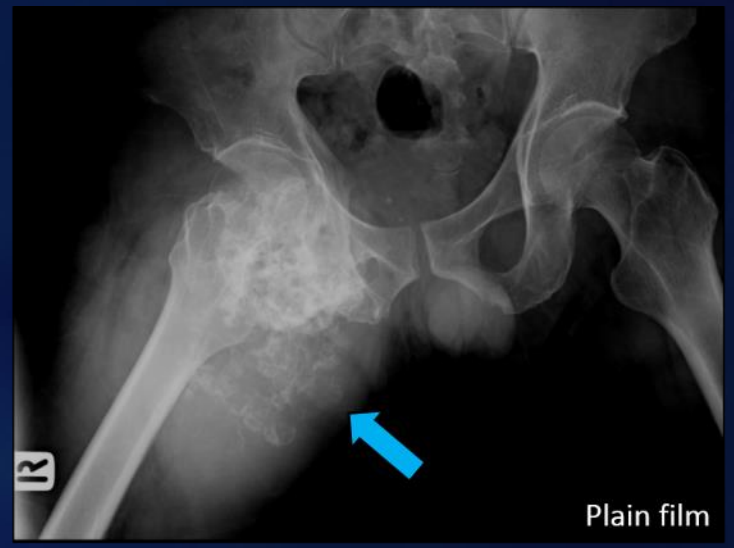
	Exostosis bursata	Cartilaginous cap
Location	• Overlying or adjacent to exostosis • Relate to sites with motion	• Overlying osseous part of exostosis • Connected to bone
US	• Anecho with posterior enhancement of fluid component	• Solid hypoechoic tissue
If calcification	• Dystrophic calcification • Osteochondral bodies (secondary synovial osteochondromatosis)	• Punctate, ring and arc, popcorn (mineralize chondroid tumor matrix)
MRI • T1WI • T2WI • Post contrast	• Low SI • Bright SI • Thin or irregular peripheral enhancement may look similar	• Low SI • Bright SI • Irregular peripheral and septal enhancement
MRI special sequence • Fat-suppressed three-dimensional spoiled gradient-recalled (SPGR)	• Low SI due to free water	• High SI due to bound water in cartilage

Case Comparisons: Osteochondroma with secondary chondrosarcoma









- Bony protuberance from anterior surface of right acetabulum with continuity of cortex and medulla → osteochondroma or exostosis
- Fluid signal intensity lesion with peripheral and septal enhancement overlying osseous part of exostosis → cartilaginous cap more than 2 cm in maximum thickness
- Ring and arch calcification → mineralize chondroid matrix

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