1- LIPOMA ARBORESCENS.

2- ACUTE OSTEOMYELITIS.

BS MÃ NGUYỄN MINH TÙNG
P. MRI-CT- PK CƠ XƯƠNG KHỚP

CASE 1

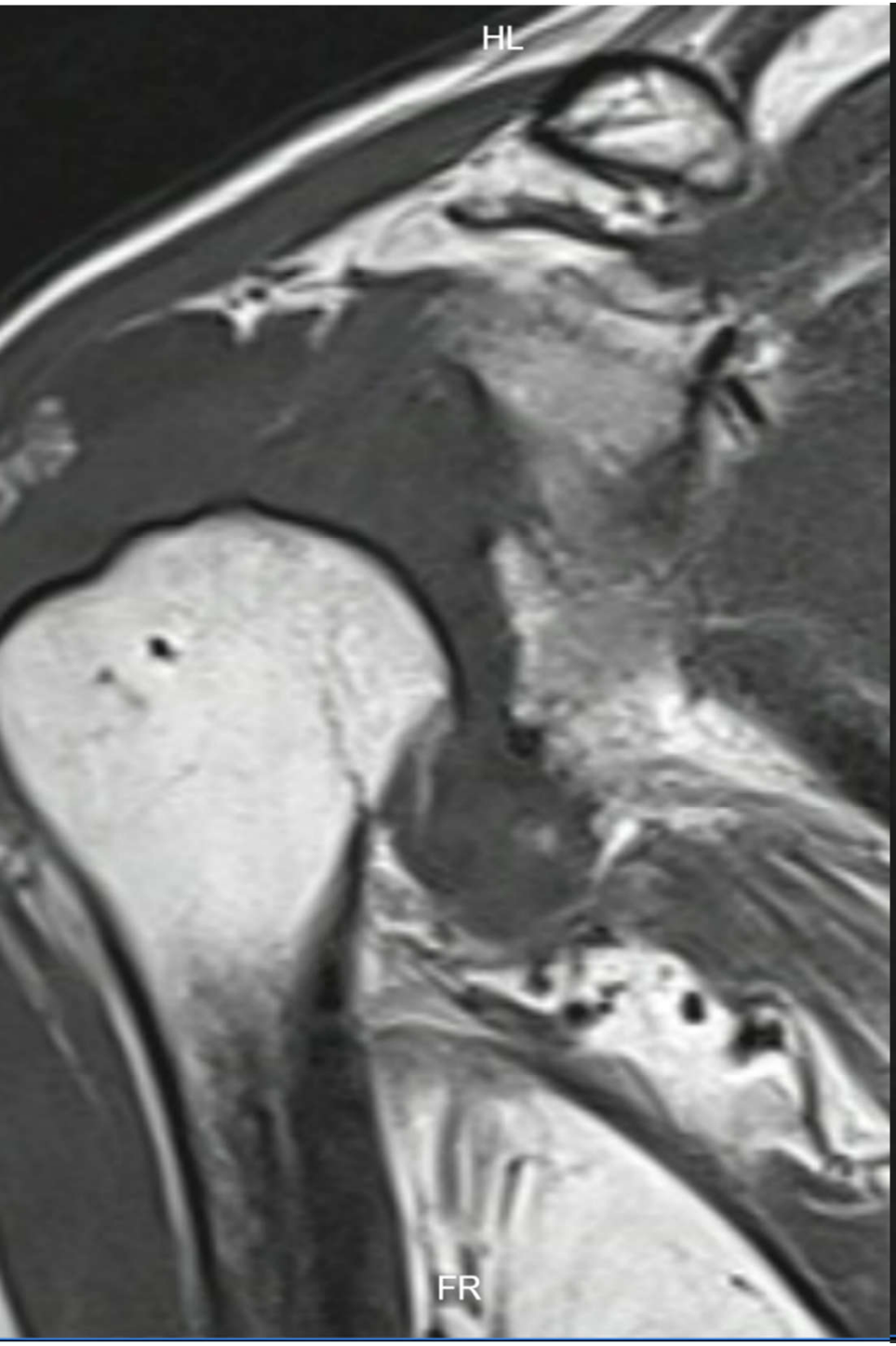
BN: NAM 60 TUỔI

ĐC: TP. HCM

LS: ĐAU KHỚP VAI PHẢI.

KHÁM: PM- BS TƯ

CHỈ ĐỊNH: MRI KHỚP VAI. ĐẾN MEDIC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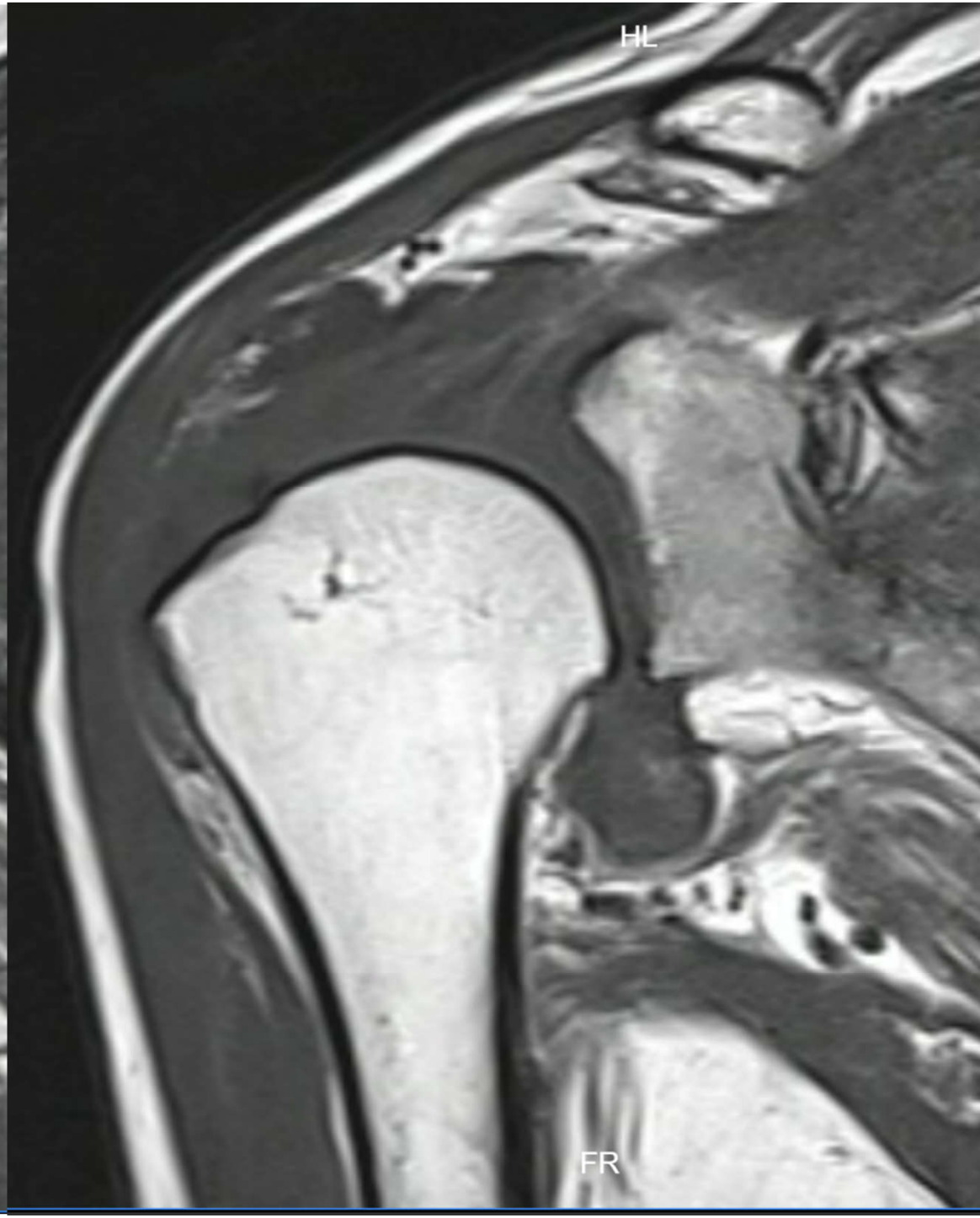
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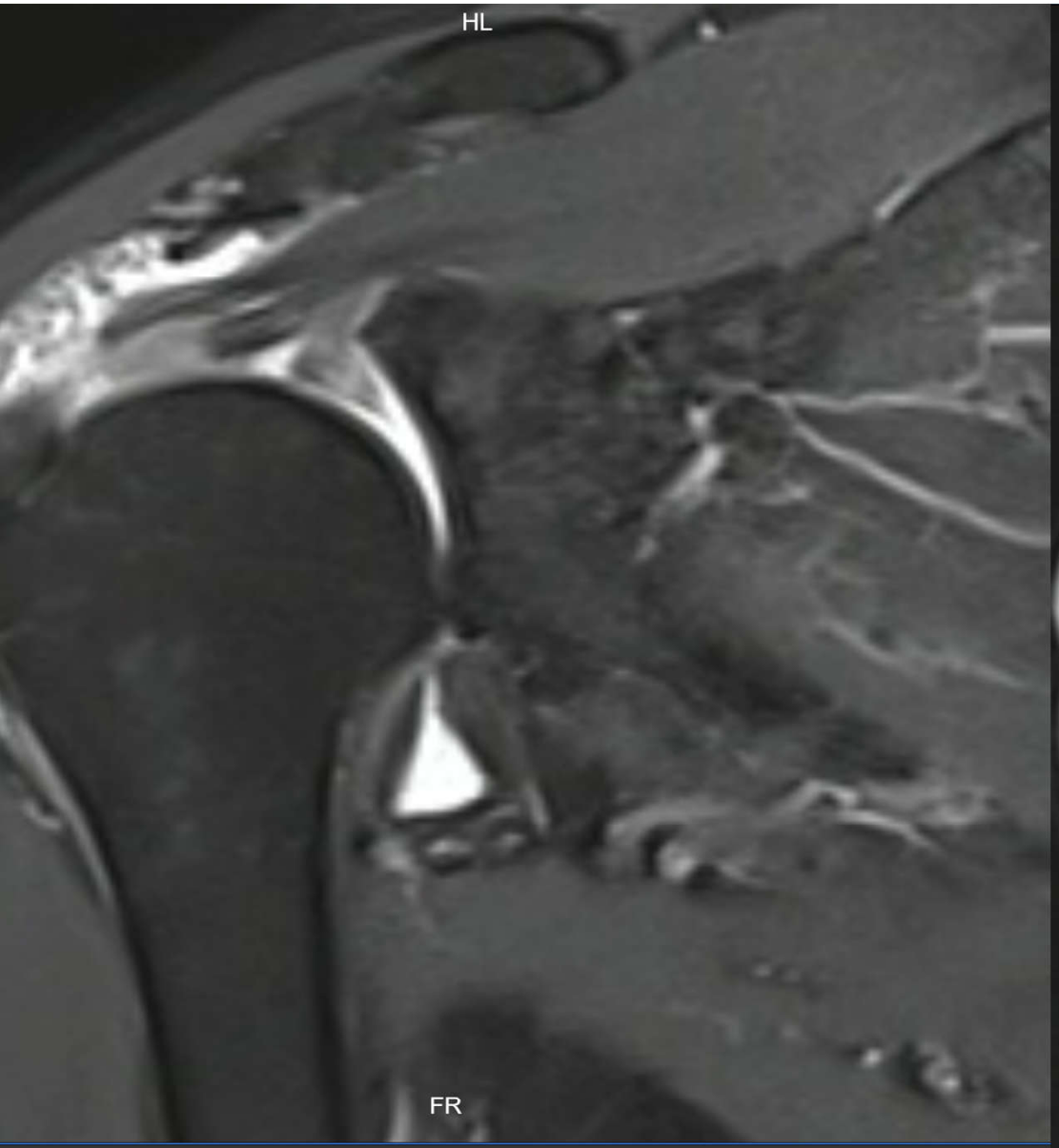

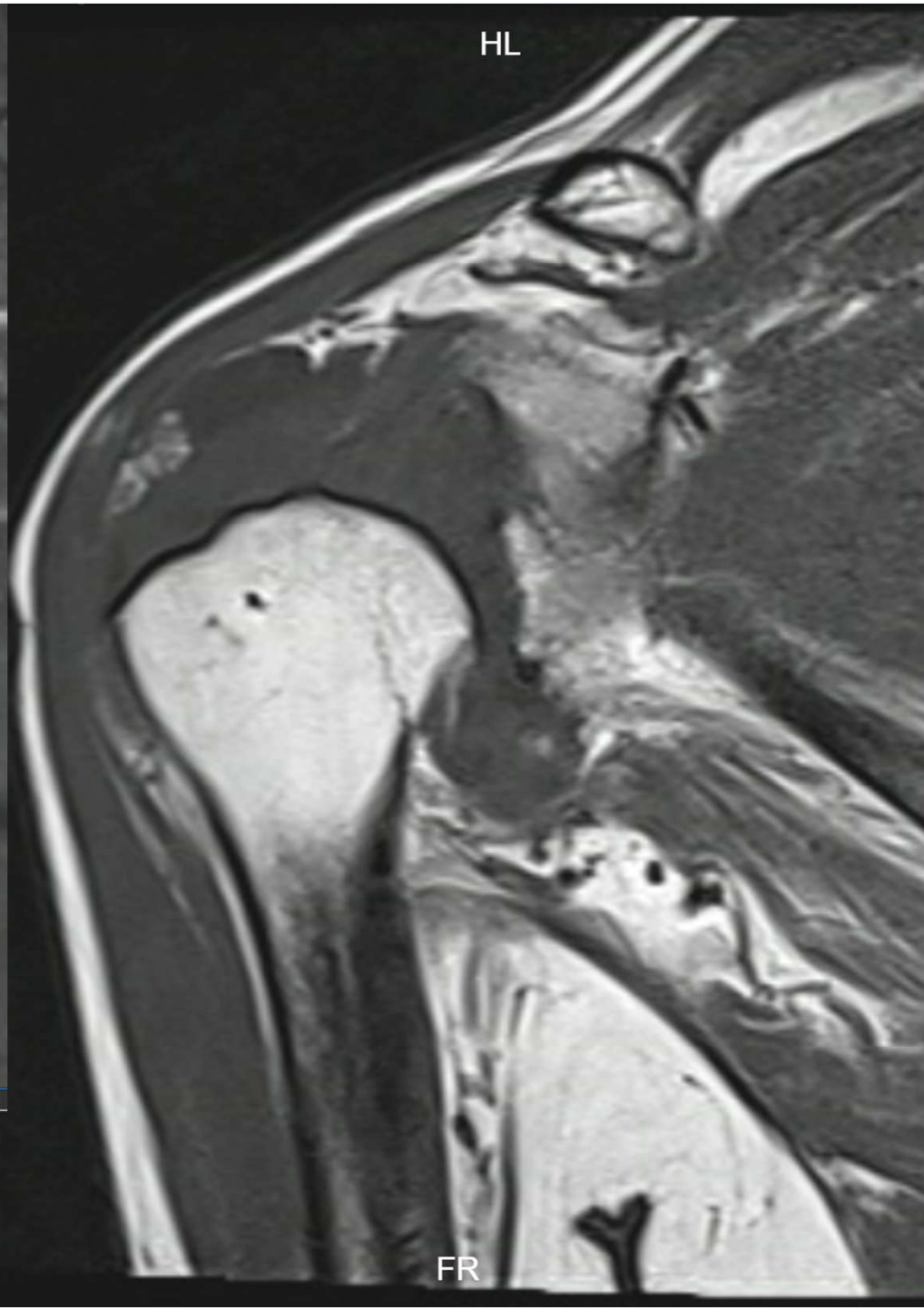

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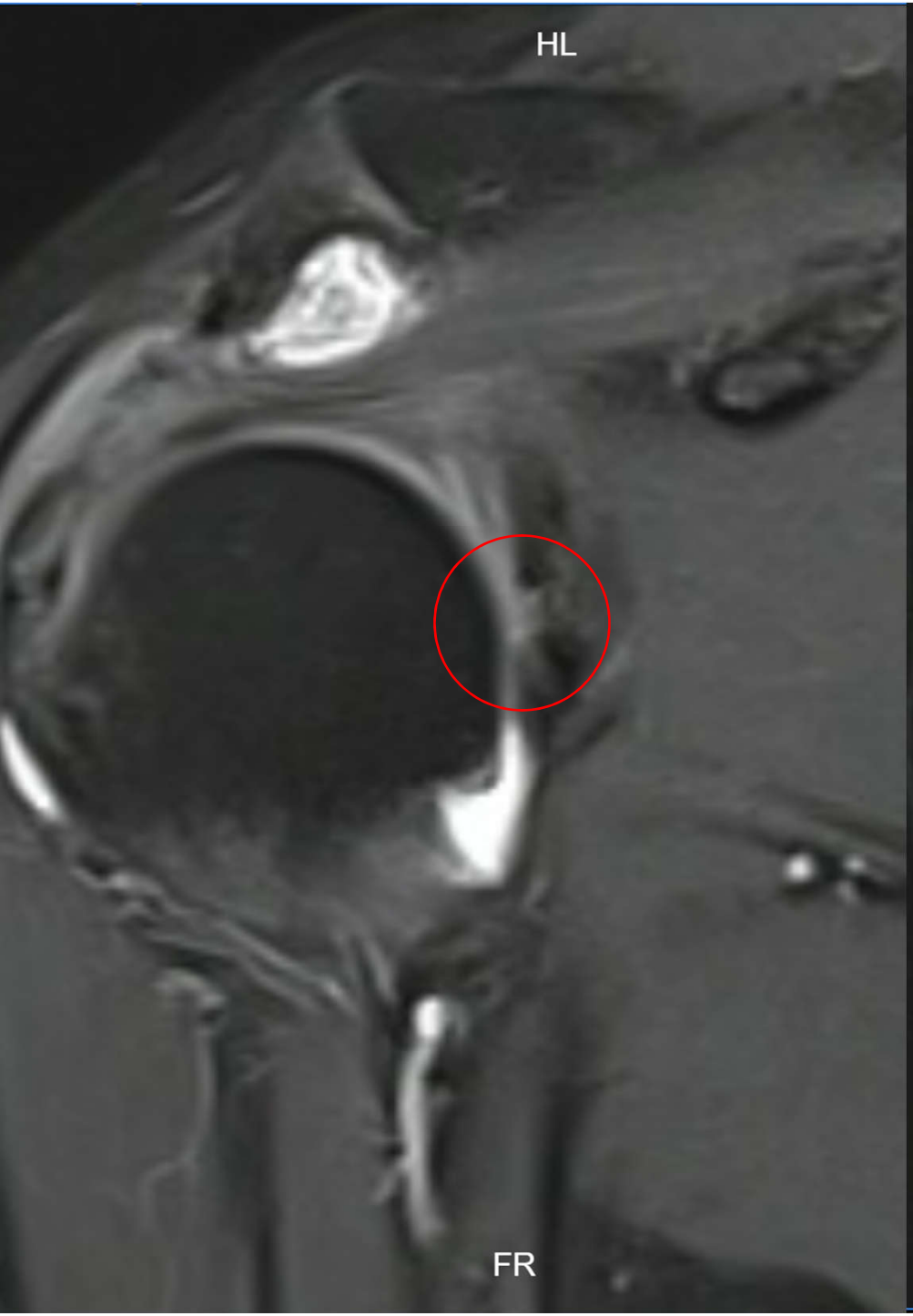
Thick: 3.50 mm Loc: 80.45 mm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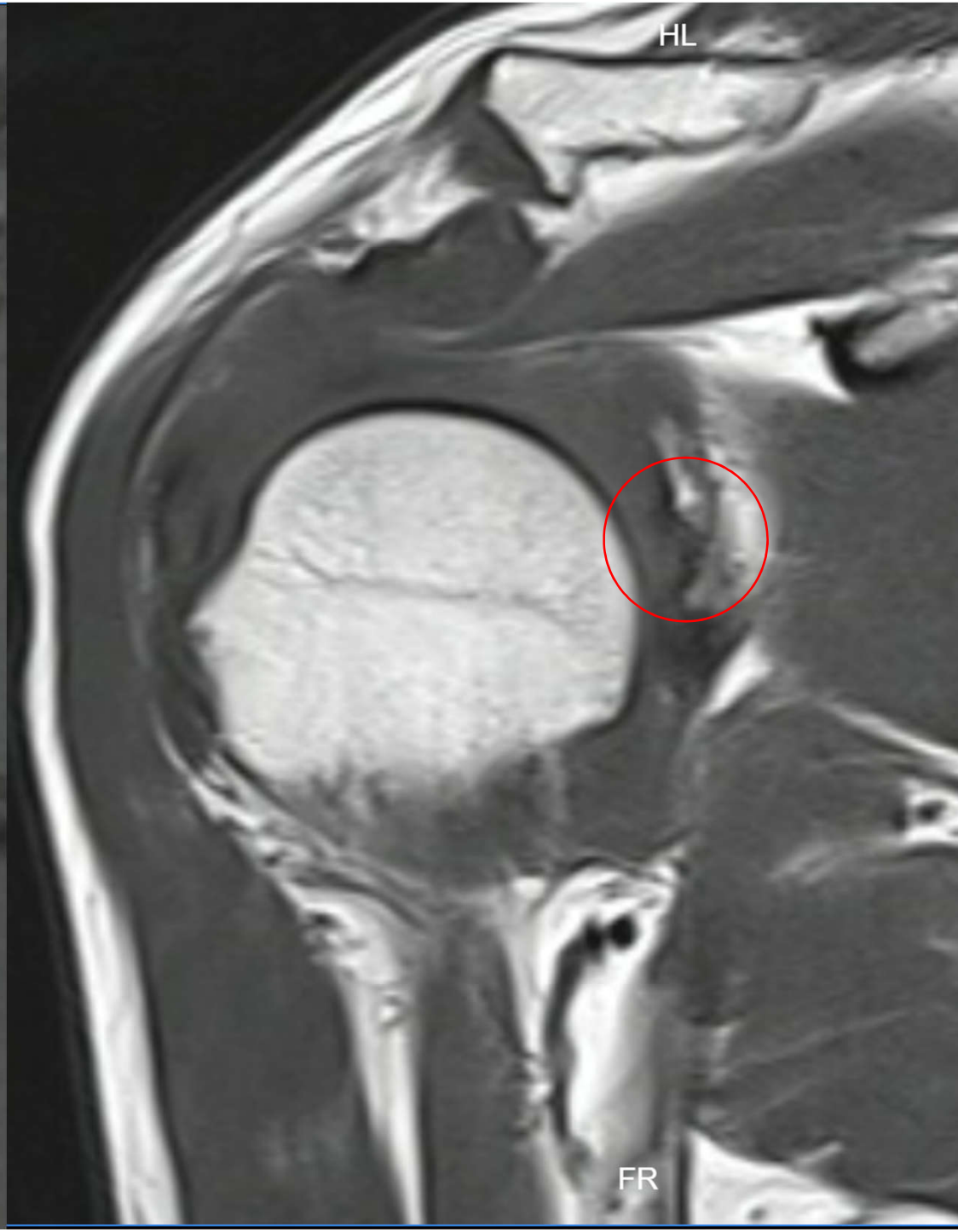
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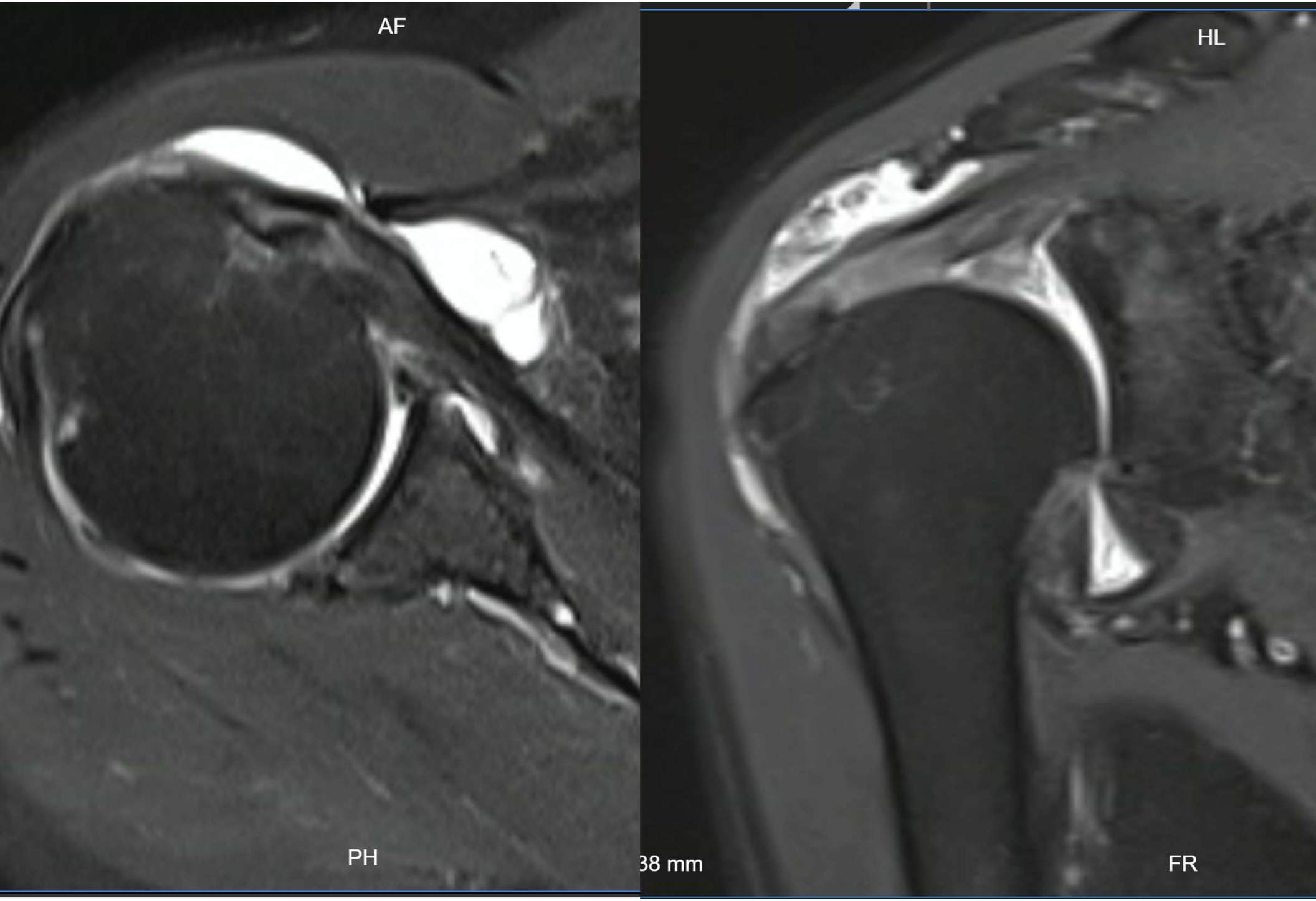
AF
PH
HL
38 mm
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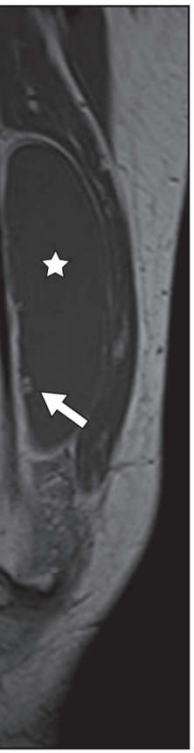
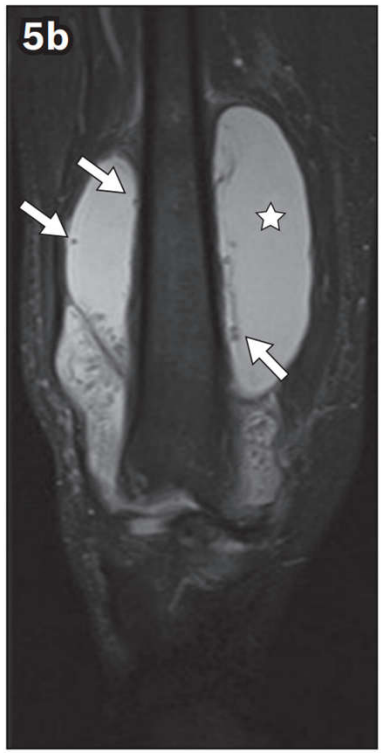
DISCUSSION

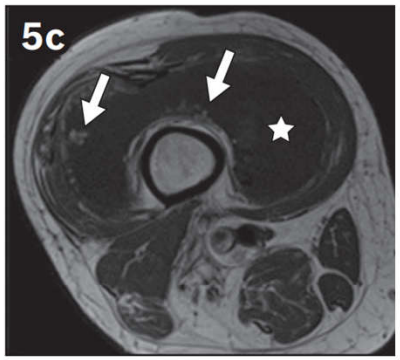
Synovial lipomatosis is an uncommon tumor-like lesion of the synovium, usually affecting the suprapatellar pouch of the knee joints.[3] It derives its name as Hoffa disease after a German surgeon Albert Hoffa, who described a condition localized to the infrapatellar fat pad in young athletes, in 1904, resulting in pain, swelling, and restricted movement of the knee, characterized by traumatic and inflammatory changes. It is also termed as villous lipomatous proliferation of the synovium or lipoma arborescens.[4]

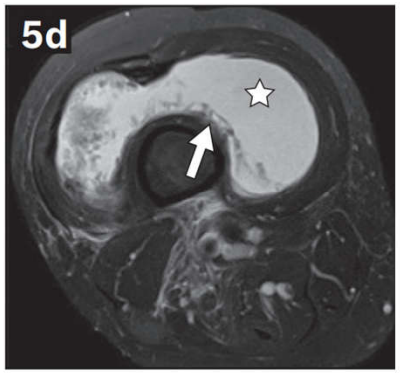
The etiopathogenesis of this condition is still not understood. Causes that have been implicated include, trauma, inflammation, rheumatism, and developmental and neoplastic processes.[5,8] Three cases in the present study occurred in patients having features of osteoarthritis. This change in the synovium possibly represents a protective and adaptive response to the longstanding injury of the articular cartilage. The transformation in the synovial tissue can correspond to a metaplastic change in a chronically inflamed synovium. A magnetic radio-imaging study may show a subchondral bone cyst or erosion in cases of synovial lipomatosis.[7,8] Another

Clinical features may vary in this condition, as noted in our case series. Signs and symptoms in our case series were similar to other case studies reported in literature. The most common clinical feature included pain and swelling of the joint, and the other was joint effusion and crepitus. Proliferation of the synoviocytes results in joint effusion. Extensive involvement may cause a pressure effect in the joint space. Pain in this condition could be either due to the effect of pressure or may be a result of the primary joint disease eroding the articular cartilage. The predominant location, in this case study was the knee joint, a feature well-documented in literature. Rare cases have been reported in literature with bilateral knee joint involvement and multifocal lesions affecting multiple joints.[3,9,10]

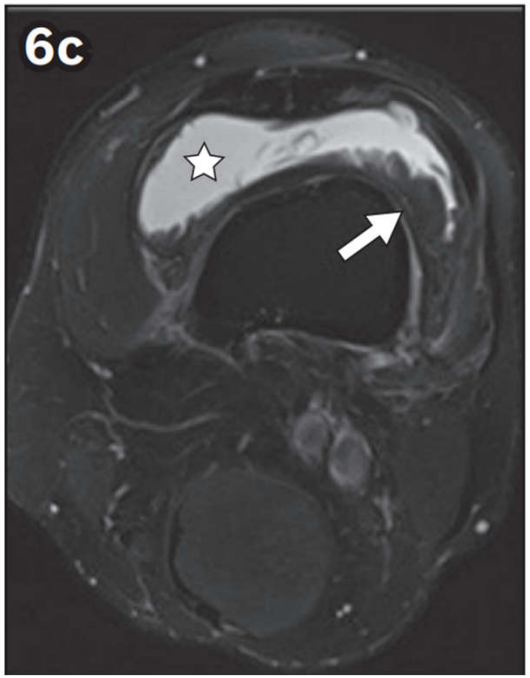


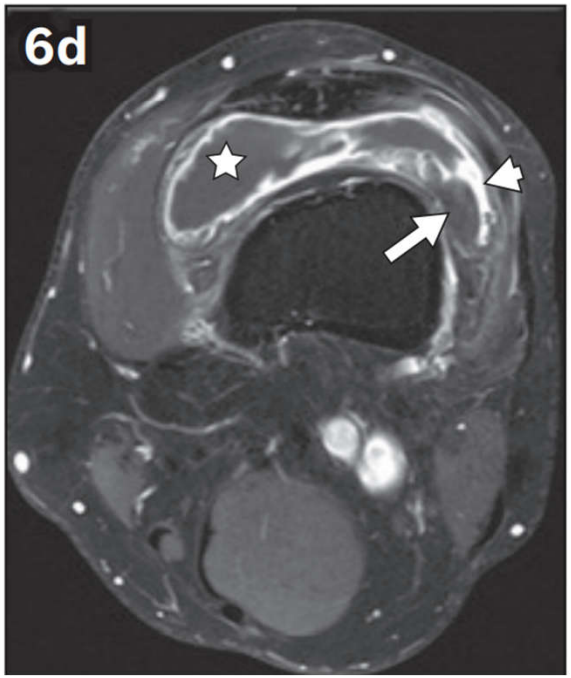


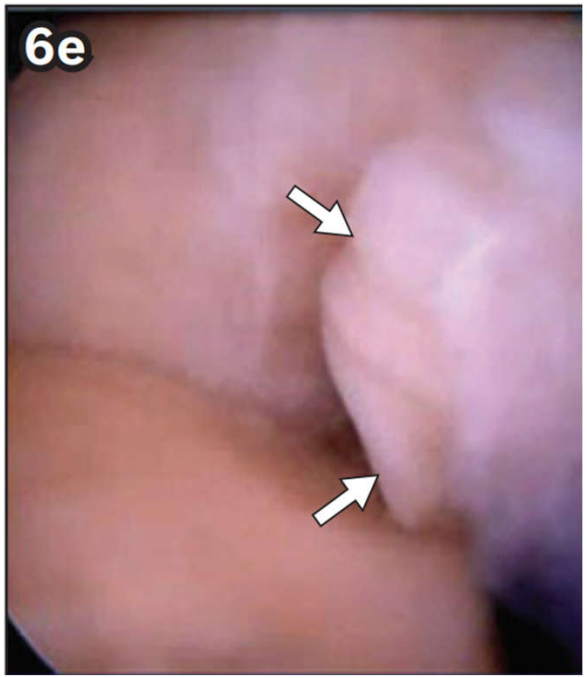


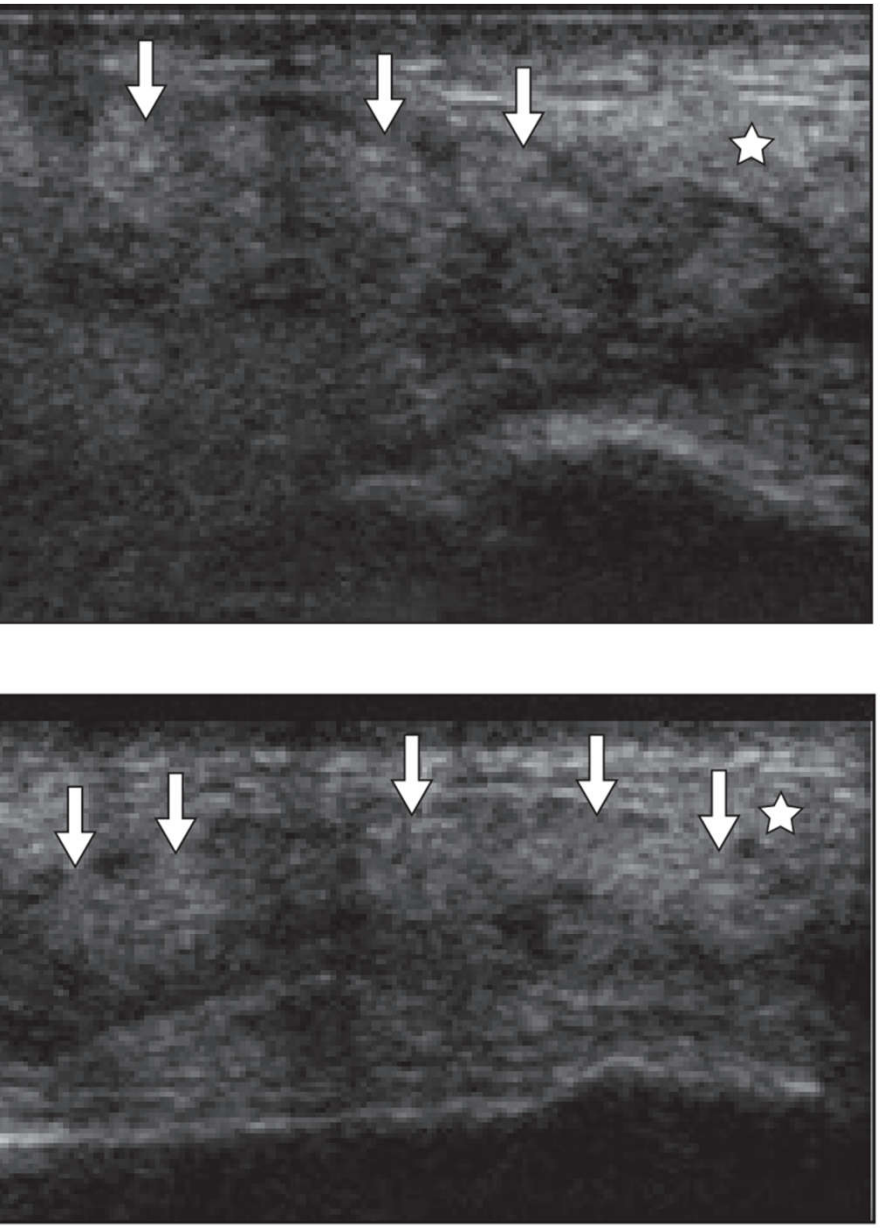


MR imaging may also demonstrate associated abnc
such as joint effusion (Figs. 4, 5 & 6), which is seen in a
cases at the time of presentation.[4,9] In addition, in the se
type of lipoma arborescens, there may be bac
degenerative changes and meniscal tears (Fig. 3)
not observed in the primary type (Fig. 4). The sub
fatty proliferation in lipoma arborescens usually attain
three morphological patterns: (a) diffuse villous form,
the entire hypertrophied synovium (Fig. 5); (b) focal
frond-like form (Fig. 6); or (c) a mixed form of
aforementioned patterns (Fig. 7).[15]









On ultrasonography, the villous fatty projections of arborescens typically display a high echopattern, simila of adjacent subcutaneous fat, and may undulate in re within the surrounding effusion. The mass is usually consistency and compressible (Fig. 2c & d), as opp the firm and noncompressible masses of PVNS. Mo as ultrasonography is inexpensive, easily available ar accurate in determining the location and extent of arborescens in various synovial surfaces, it can be use initial diagnostic step before the application of more ex cross-sectional imaging.[6,13]

CONCLUSION

Lipoma arborescens is a benign indolent synovial proliferative disease and an uncommon cause of articular masses. It primarily involves the knee joint, with rare occurrences in the periarticular bursae and tendon sheaths. This entity can be confidently diagnosed by its characteristic features on various imaging modalities, particularly MR imaging. Awareness of its clinical and imaging findings and possible differential diagnoses is essential for early diagnosis and treatment, as well as to avoid misinterpretation of this condition as other aggressive articular masses.

CASE 2

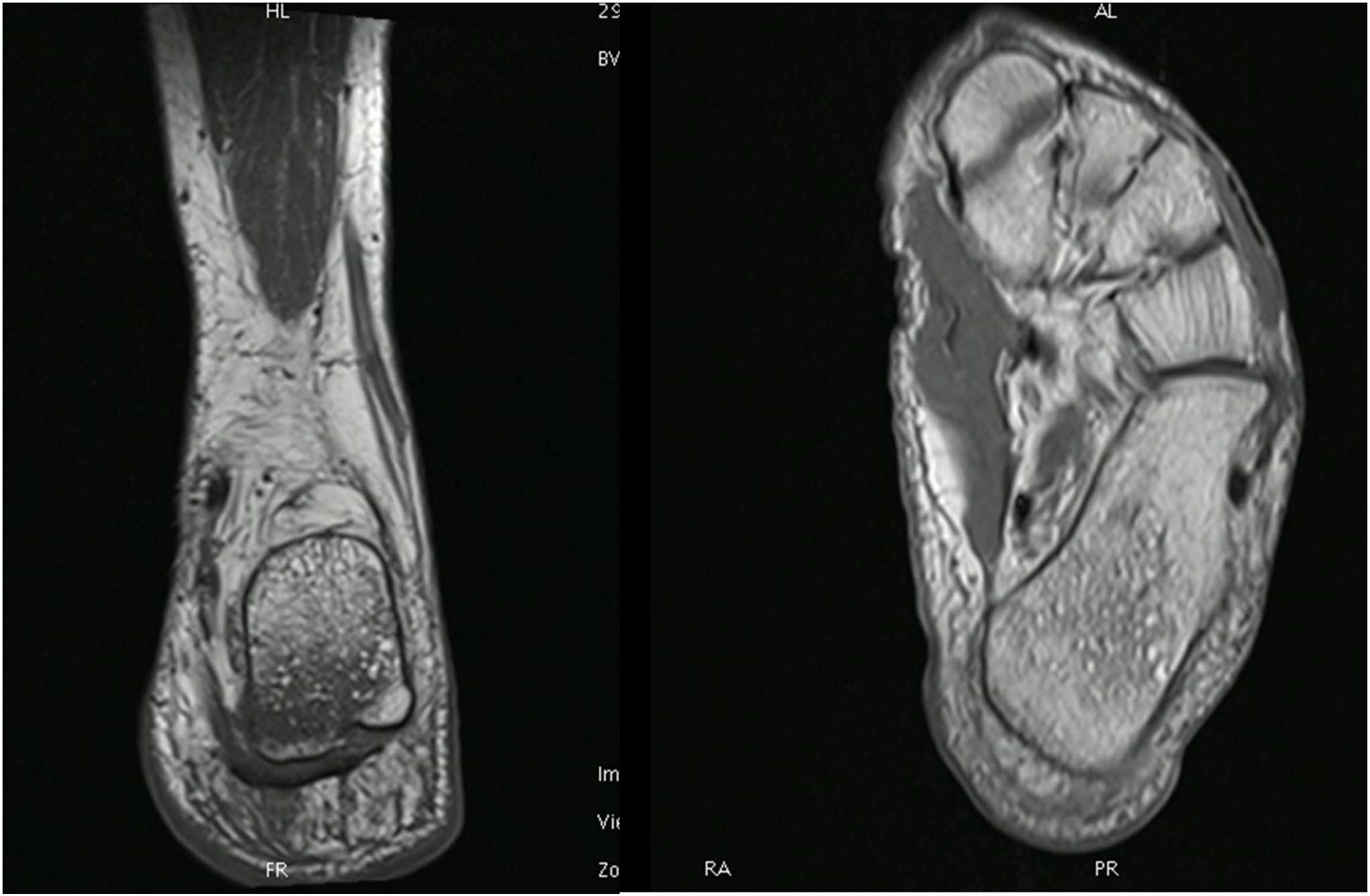
N: NAM 61 TUỔI

C: CẦN THƠ

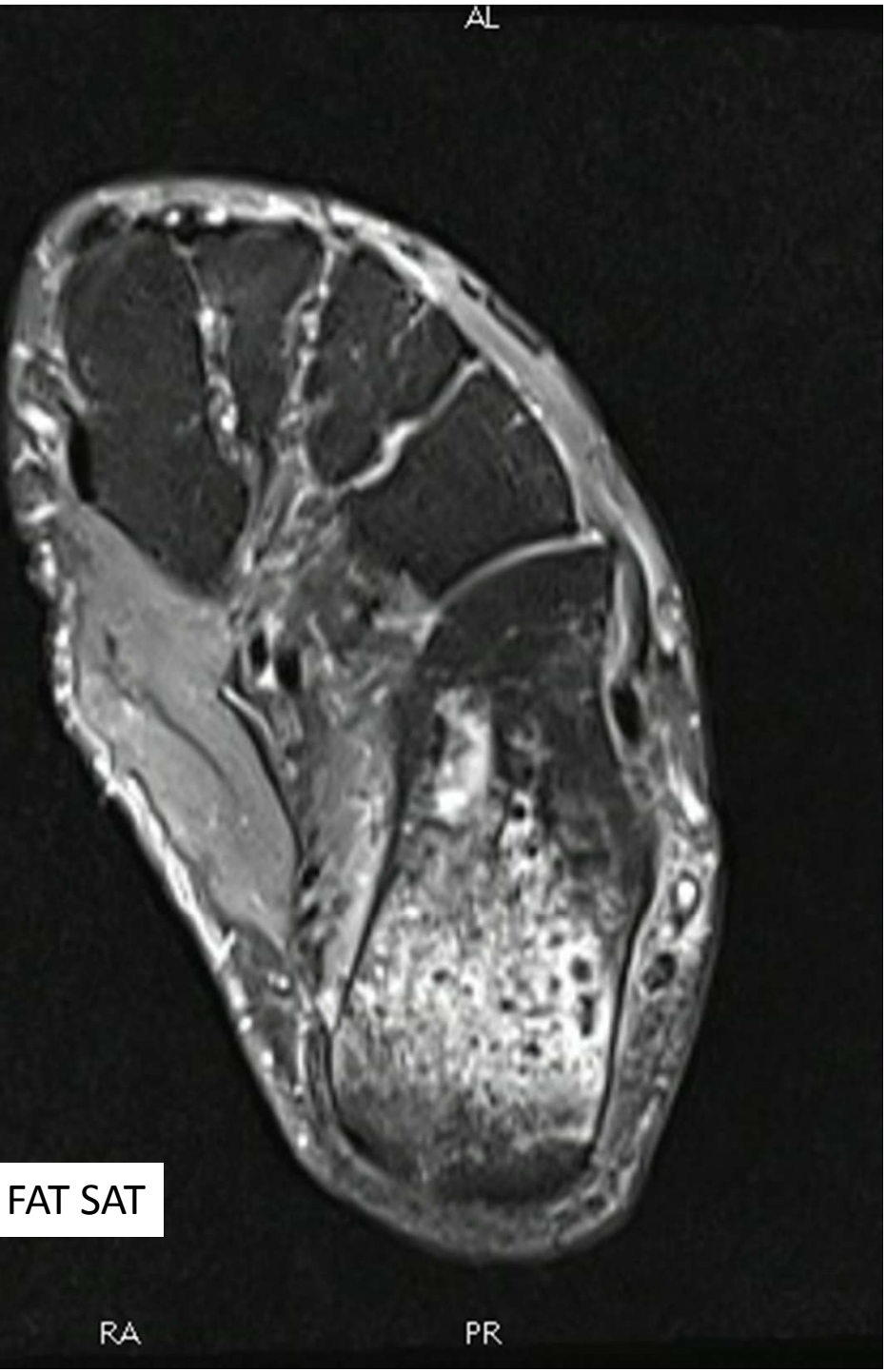
: ĐAU GÓT CHÂN 2 TUẦN, KHÔNG CHẤN THƯƠN

HÁM: BV MEDIC- CẦN THƠ

HỈ ĐỊNH: MRI BÀN CHÂN.



Fat globule sign on T1–WI. Axial, coronal T1–WI showing fat globules within the bone marrow edema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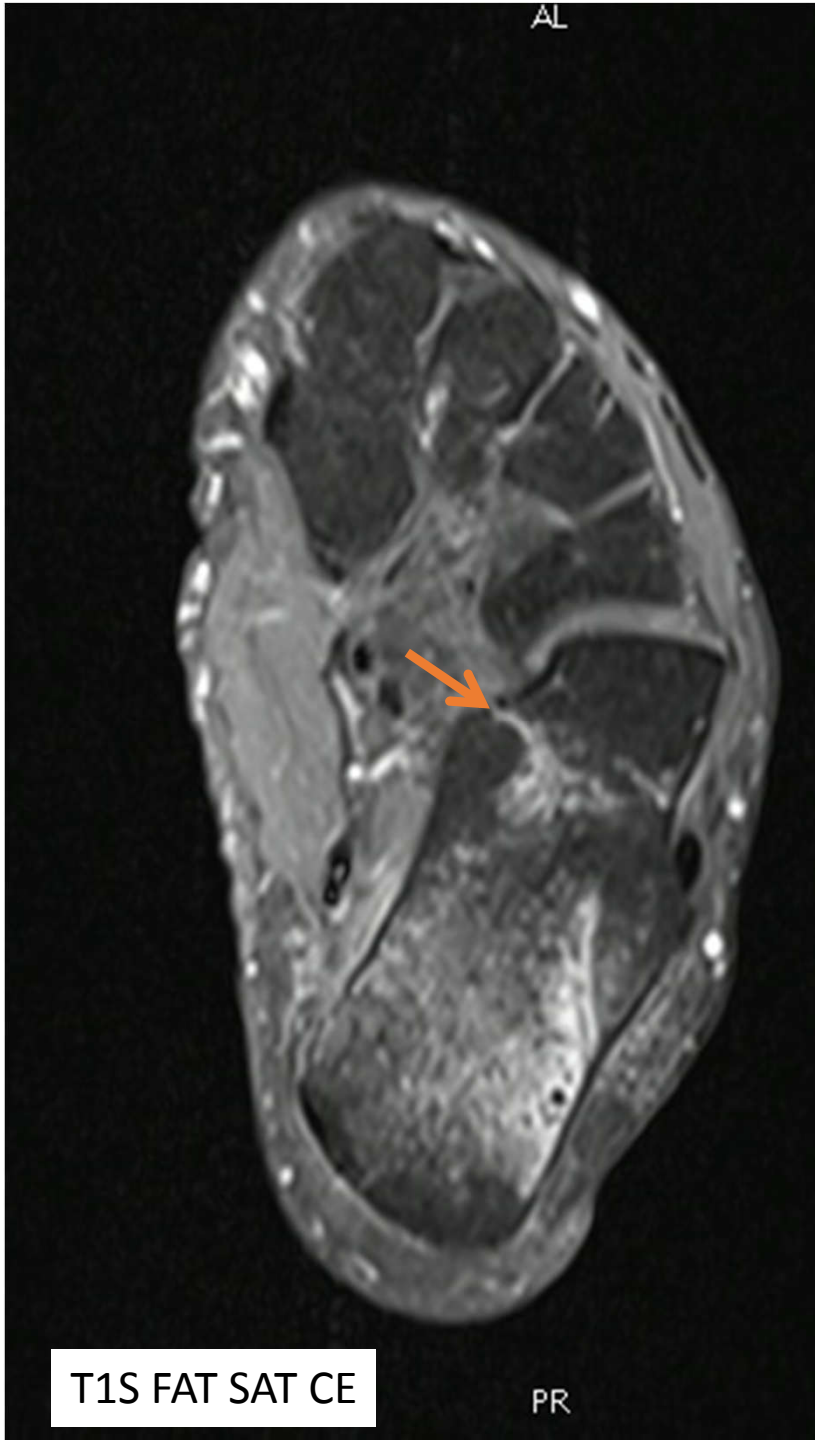
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gadolinium contrast administration. **(a)** shows a joint in which the joint capsule (blue) is attaching underne
plate. This intra-articular location of the growth plate may lead to rapid spread of infection into the adjacent j
a joint in which the joint capsule (blue) is attaching above the growth plate. An extra-articularly located growth
against early joint contamination. **(c, d)**. Example on MRI of a patient with rapid spread of the infectious focus
left shoulder joint. Because the joint capsule of the shoulder insert below the growth plate, metaphyseal ost
easily spread through the medial cortex directly into the joint resulting in synovial enhancement (white arro

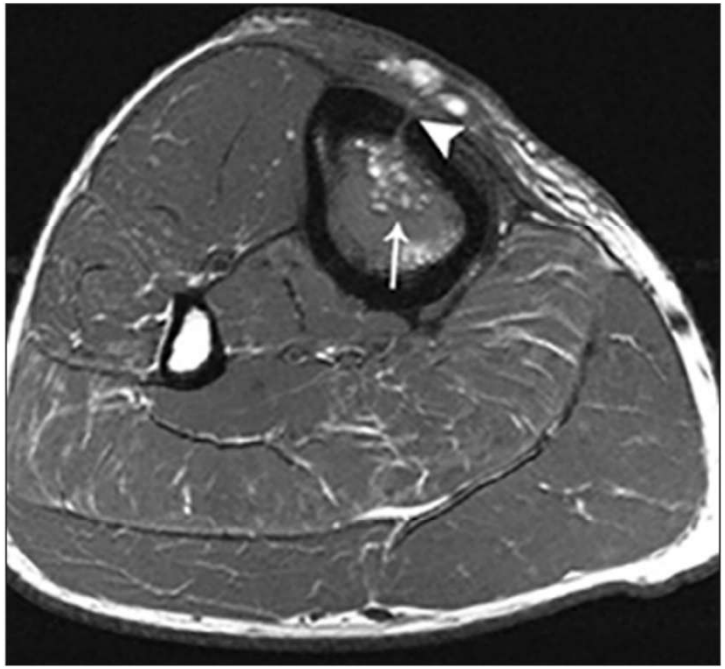

Figure 9: Fat globule sign on T1–WI. Axial T1–WI showing fat globules (white arrow) within the bone m
of the tibia. In addition, there is a cortical defect – also known as the cloaca – perforating the ventrom
the tibia (white arrowhead).

Julie; Posadzy, Magdalena;
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Conclusion

The variable imaging appearance of osteomyelitis may be explained by the different pathogenic mechanisms involved in the spread of the infection and by the age-related vascularization of bone. Standard radiography is still the baseline examination for follow-up and differential diagnosis. Ultrasound is the preferred modality in case of suspicion of acute osteomyelitis in children or concomitant septic arthritis. US-guided biopsies and/or aspiration are safely and easily performed. CT may be useful in the evaluation of chronic osteomyelitis, particularly in areas with a complex anatomy. CT may provide information regarding the presence of sequestra, cloaca, cortical destruction and reactive involucrum formation. In addition, it is used for imaging-guided biopsy and aspiration of infectious material for microbiological examination. MRI is the preferred modality for early detection of osteomyelitis. The fat globule sign on T1–WI is pathognomonic for acute osteomyelitis whilst the penumbra sign is pathognomonic for a Brodie abscess in subacute osteomyelitis. A combination of T1– and Fat–Sat T2–WI and gadolinium enhanced imaging is mandatory.

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