

Musculoskeletal Pseudo-tumor

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Enchondroma?

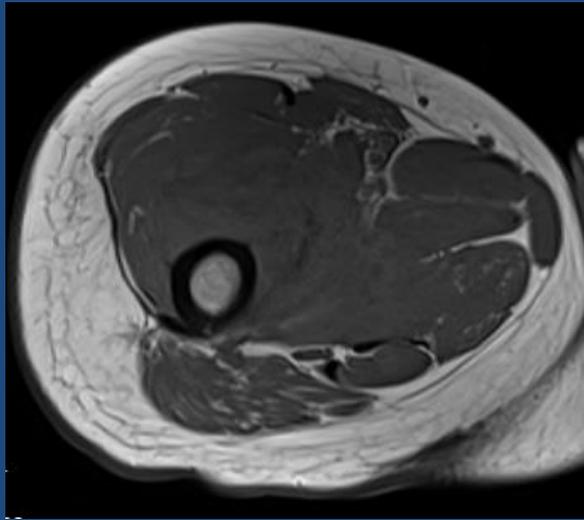


Osseous lymphoma?

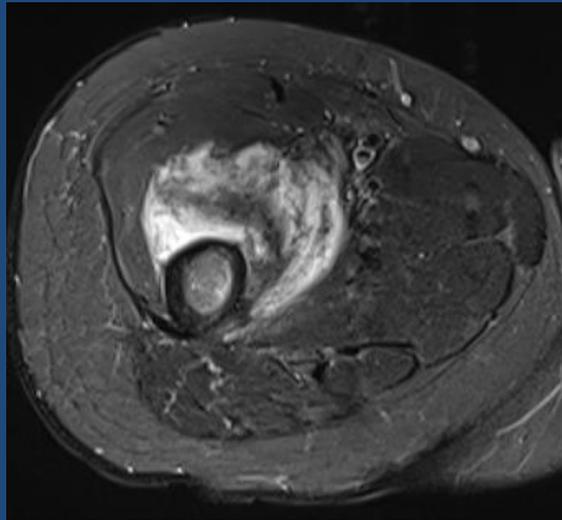


Metastasis?

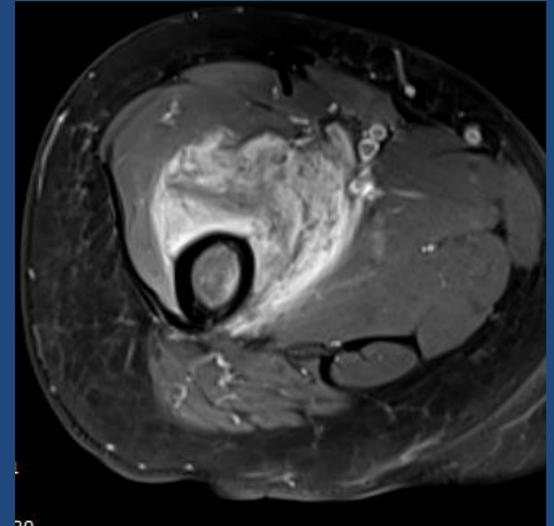
Soft tissue sarcoma?



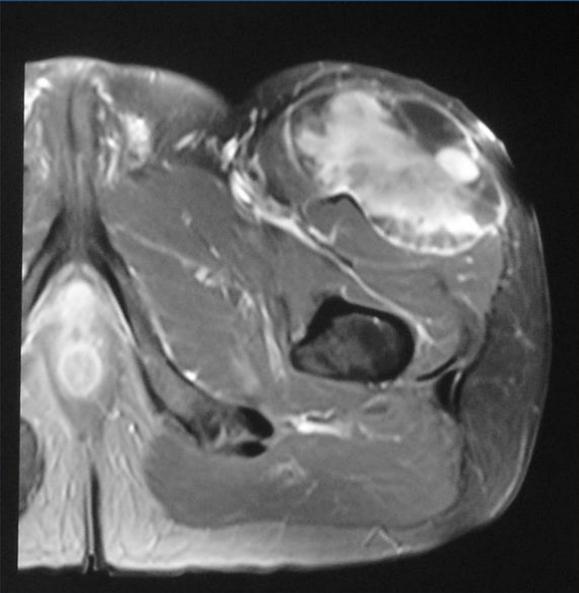
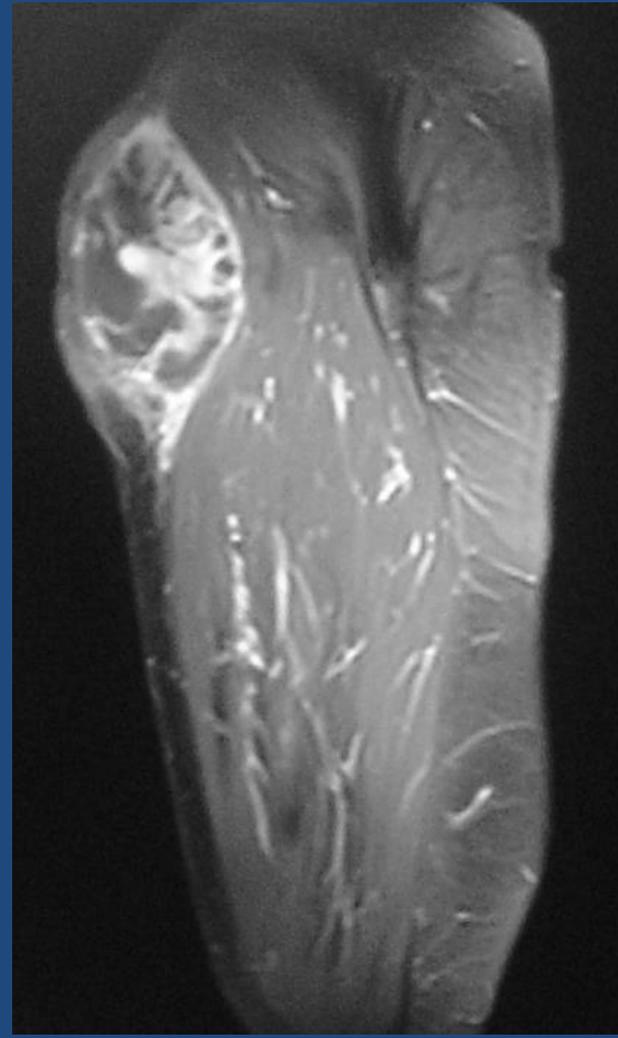
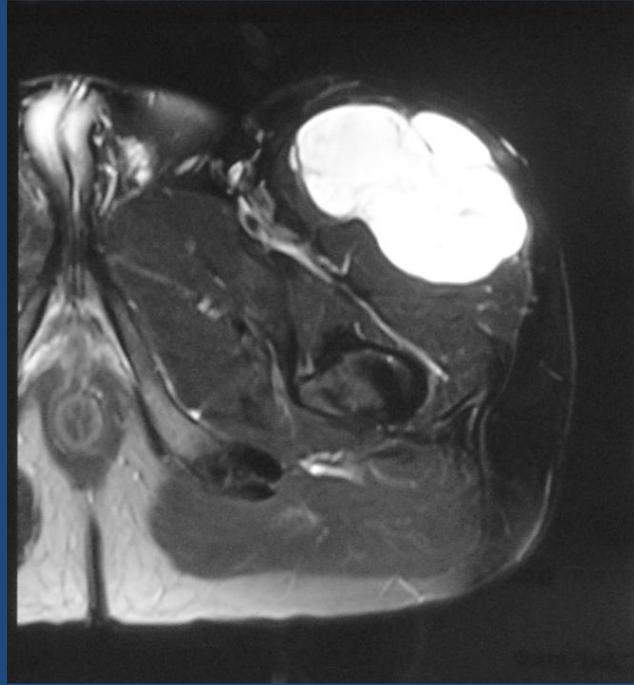
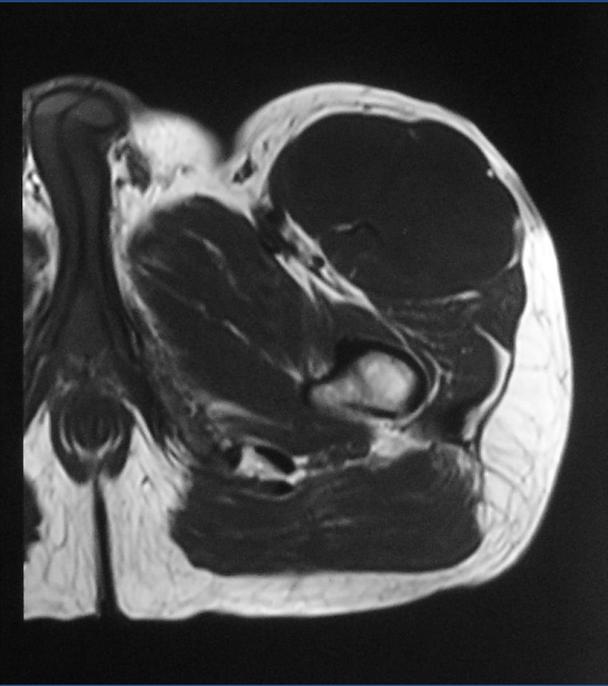
T1W



T2FS



T1FS+Gd



Soft tissue sarcoma?

Pseudo-tumor

Musculoskeletal pseudo-tumors
from physical exam
(palpable mass)

Musculoskeletal pseudo-tumors
from radiography
(osteolytic lesion)

Palpable Pseudo-tumor

Three broad categories

- Normal variant
- Traumatic lesion
- Infection/Inflammation

Palpable Pseudo-tumor

Normal variant

- Asymmetric fat deposition
- Asymmetric muscle/tendon hypertrophy
- Accessory muscle
- Bony prominence

Palpable Pseudo-tumor

Traumatic lesions

- Muscle/tendon tear or rupture
- Hematoma
- Morel-Lavallee lesion
- Myositis ossificans (traumatic heterotopic ossification)

Palpable Pseudo-tumor

Infection or inflammation

- Focal myositis or myopathy
- Abscess
- Tenosynovitis
- Bursitis
- Myonecrosis
- fat necrosis
- FB granuloma or other granulomatous lesion
- Arthritis

Radiographic Pseudo-tumor

- *Pseudo-lesions*
- *Fat deposition in bone marrow & Localized osteoporosis (Disuse)*
- *Osteomyelitis*
- *Insufficiency fracture*
- *Hemophilic pseudo-tumor*
- *Arthritis/arthropathy*
- *Metabolic disease (e.g. Brown tumor, amyloidosis)*
- *Particle disease*

Radiographic Pseudo-tumor

Osteomyelitis

- Osteomyelitis with moth-eaten or permeative bone destruction may mimic malignant bone tumor e.g. metastasis, multiple myeloma, Ewing's sarcoma, NHL, etc.
- Indolent osteomyelitis with geographic bone destruction may simulate slow growing bone tumor or tumor-like lesion e.g. giant cell tumor, chondromyxoid fibroma, cartilaginous tumor, etc.

Radiographic Pseudo-tumor

Insufficiency fractures

- Can have ill-defined lytic appearance on plain radiograph and may mimic bone metastasis
- Background of decreased bone density, evidence of fracture lines on CT or MRI, and other insufficiency fractures with irregular sclerotic lines at typical locations are helpful diagnostic clues.

Radiographic Pseudo-tumor

Hemophilic pseudotumor

- Secondary to repetitive bleeding into the bone
- Affected bones in order of frequency : femur, pelvis, tibia and small bones of hands
- Well-defined, unilocular or multilocular expanding lytic lesion of variable size
- May show endosteal scalloping, cortical thinning or thickening, traversing trabeculae or septalike structure, peripheral sclerosis
- Progressive expansion may lead to deformity or pathologic fracture

Radiographic Pseudo-tumor

Metabolic disease

- Brown tumor can mimic benign bone tumor but other radiographic findings of hyperparathyroid should guide the correct diagnosis
- Skeletal amyloidosis can manifest as aggressive expansile lytic lesion simulate tumor, commonly encountered at the hip and shoulder