

# Case 1

## Tumor of ankle joint

Sakura Shiraishi <sup>1,2)</sup>, Makoto Endo <sup>1)</sup>, Takumi Tomonaga <sup>2)</sup>,  
Nobuhiko Yokoyama <sup>1)</sup>, Taro Mori <sup>2)</sup>, Akira Nabeshima <sup>1)</sup>,  
Toshifumi Fujiwara <sup>1)</sup>, Yasuharu Nakashima <sup>1)</sup>, Yoshinao Oda <sup>2)</sup>

1) Department of Orthopaedic Surgery, Kyushu University

2) Department of Anatomic Pathology, Kyushu University

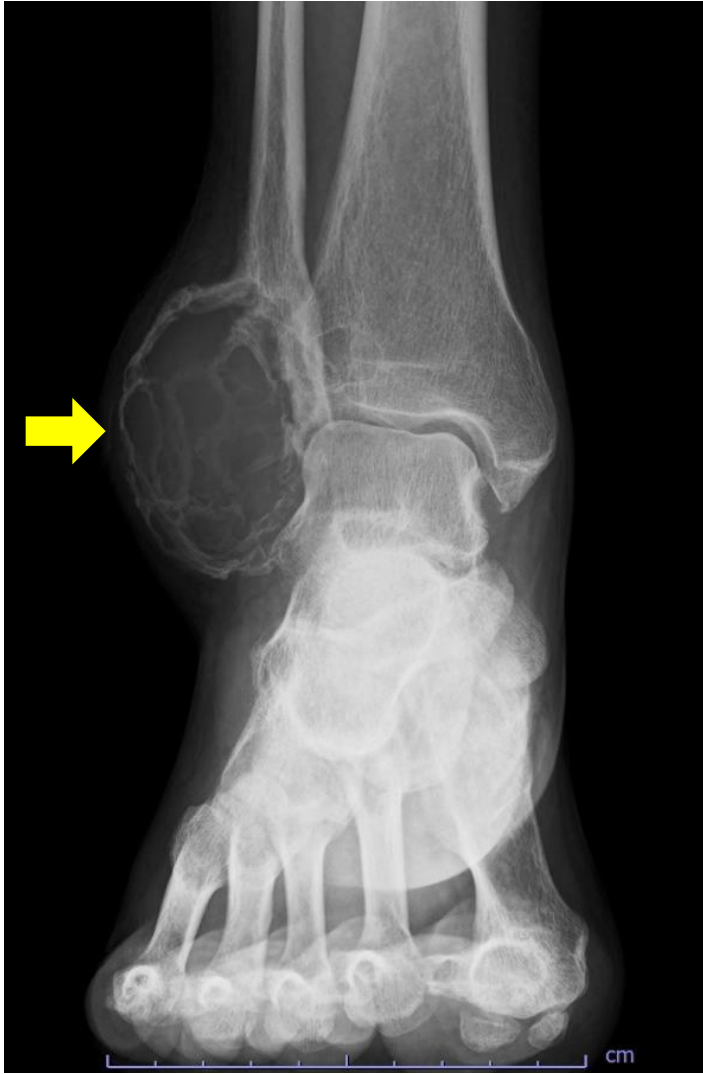
# Clinical History

## 49-year-old male

Two years ago, the patient noticed a mass on the outer side of his right ankle joint.

### <Physical examination>

- Swelling on the right ankle joint
- Tumor is elastic hard
- No tenderness



X-ray (AP)



X-ray (lateral)



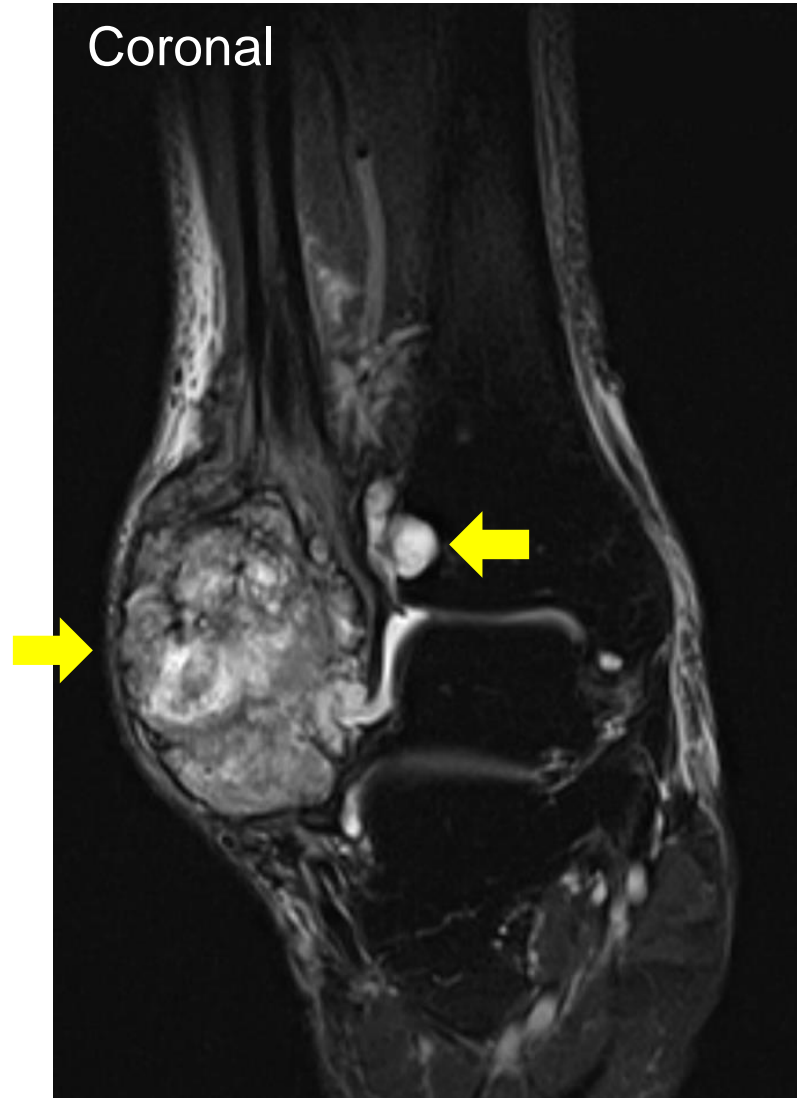
CT MPR (sagittal)

Coronal



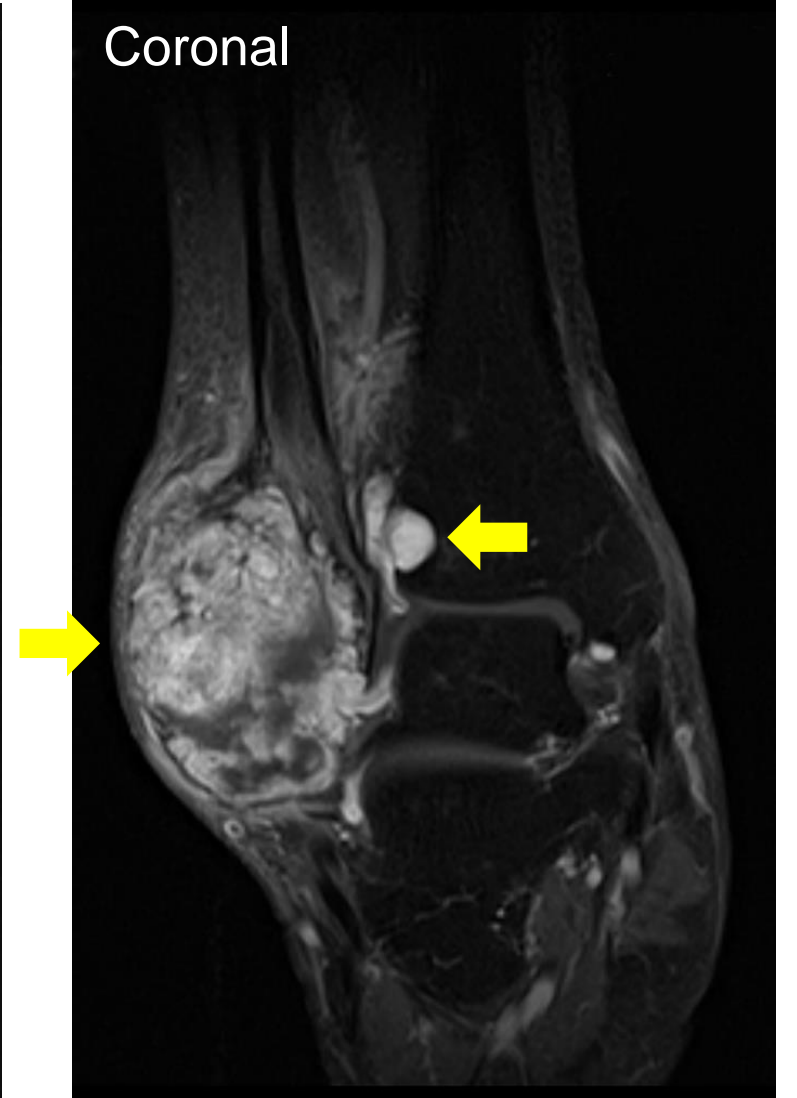
MRI T1WI

Coronal



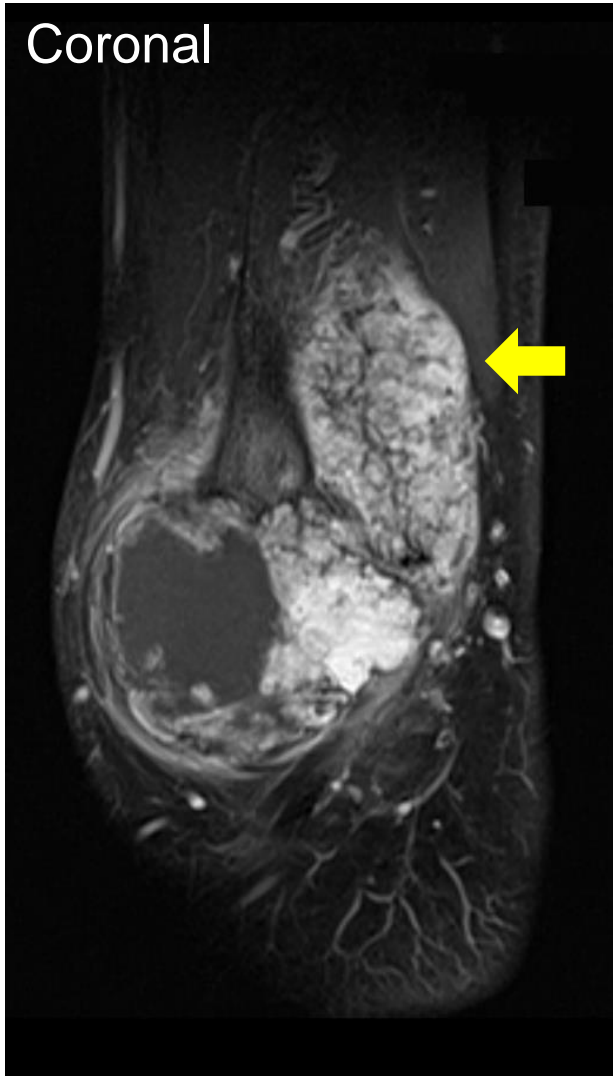
MRI T2WI

Coronal



Contrast enhanced MRI  
T1WI (Gd, FatSAT)

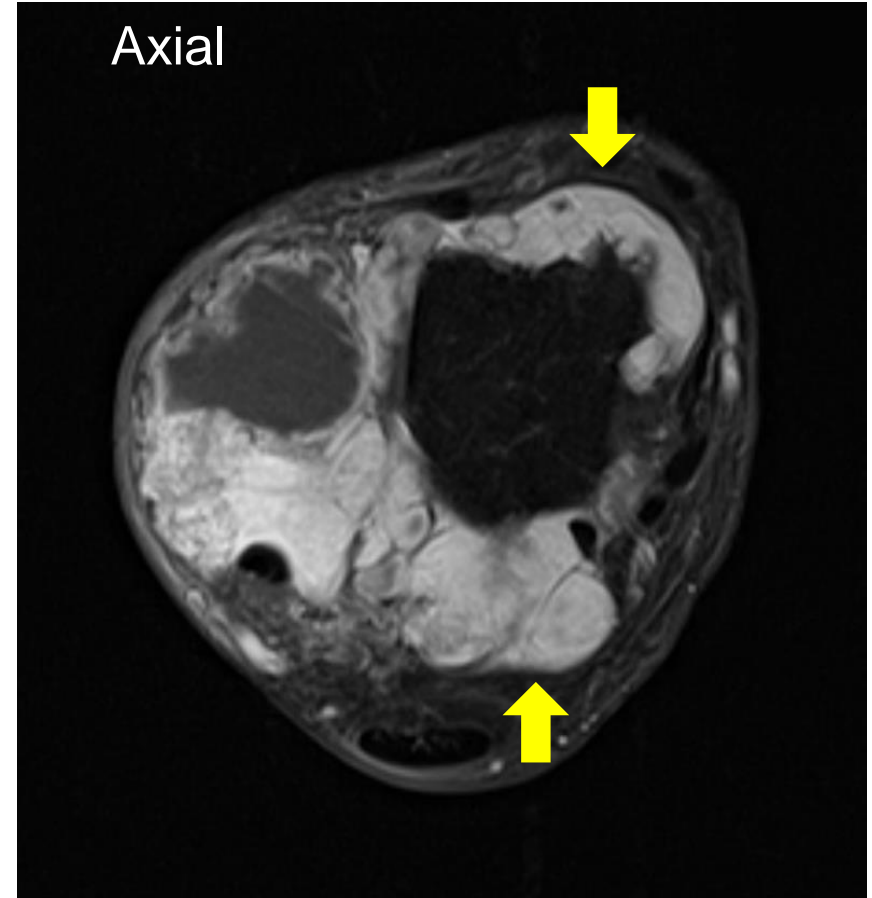
Coronal



Sagittal



Axial



MRI T1WI, Gd

# Differential Diagnosis

- A. Giant cell tumor of bone (GCT of bone)**
- B. Aneurysmal bone cyst (ABC)**
- C. Myoepithelioma**
- D. Extraskeletal myxoid chondrosarcoma**
- E. Chondrosarcoma or Atypical cartilaginous tumor**

## Case 2

# Abscopal effect following proton beam radiotherapy for recurrent dedifferentiated chondrosarcoma

Michiyuki Hakozaiki<sup>1)2)</sup> Shoki Yamada<sup>3)</sup> Yoichi Kaneuchi<sup>1)</sup> Itaru Ogawa<sup>1)</sup>  
Takeo Suzuki<sup>1)</sup> Hiroki Sato<sup>1)</sup> Osamu Hasegawa<sup>4)</sup> Yoshihiro Matsumoto<sup>1)</sup>

1) Department of Orthopaedic Surgery

2) Higashi-Shirakawa Orthopaedic Academy

3) Department of Diagnostic Pathology

4) Department of Radiology

Fukushima Medical University School of Medicine

# Case presentation

Case: 69-year-old male

Chief complaint: Right buttock pain

Past history: None

Brinkman Index: 1040 (52 years × 20/day)

## Clinical history

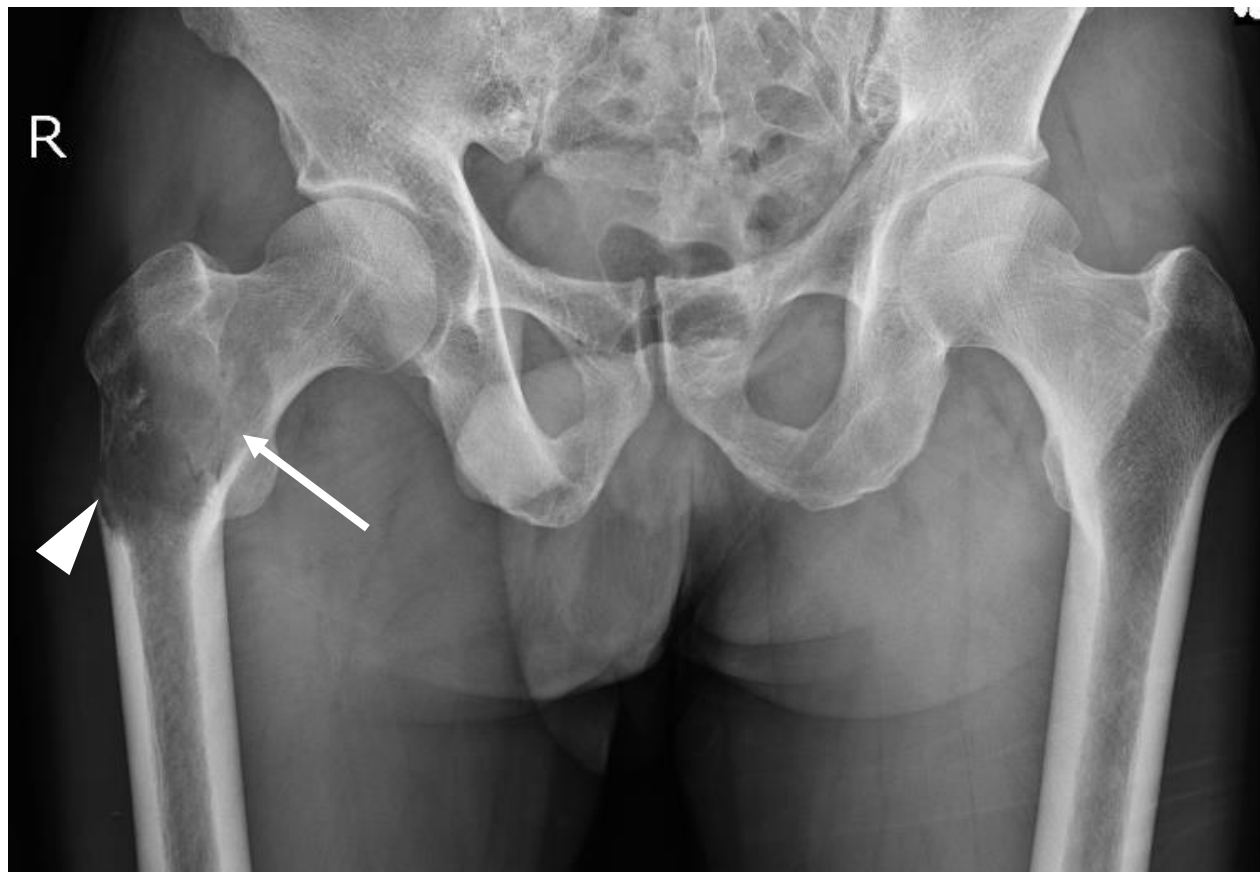
The patient noticed right buttock pain and visited a primary orthopedic clinic 20 months ago.

He was diagnosed with right sciatica due to lumbar spinal canal stenosis and received conservative treatment with medication and physiotherapy, but his pain was not improved.

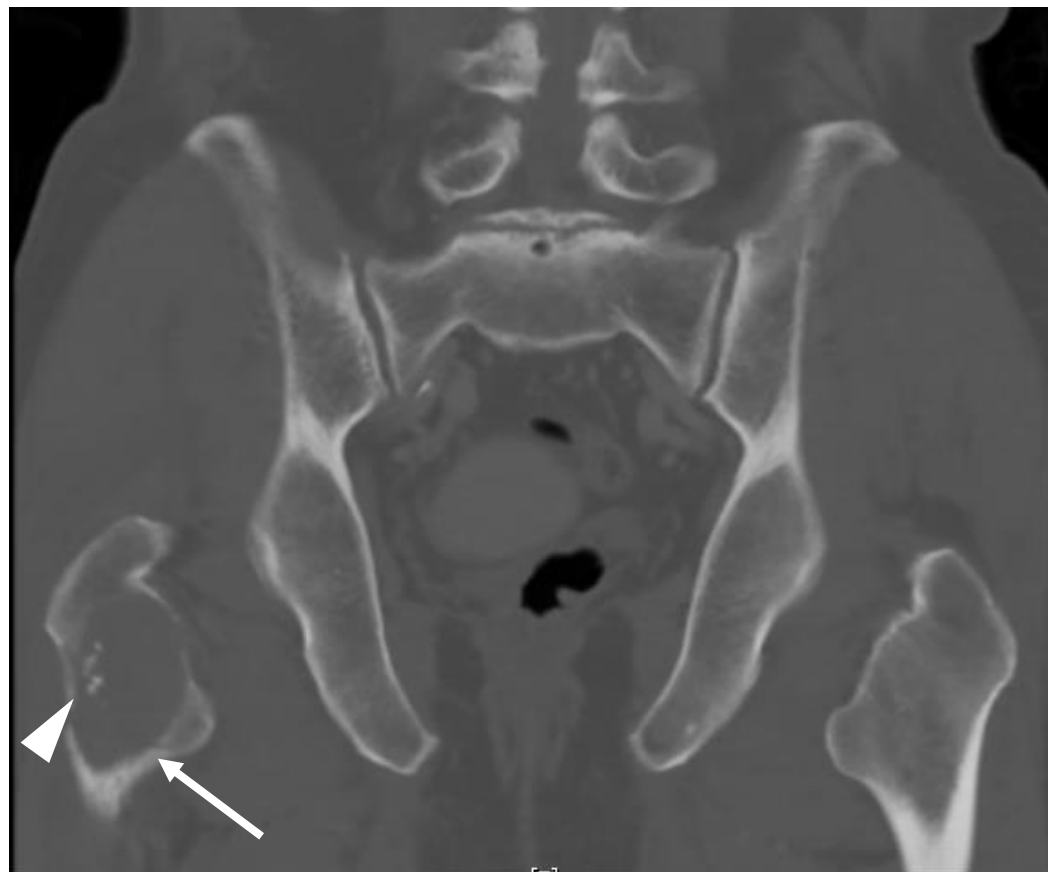
Nineteen months after the first visit, he was finally diagnosed with bone tumor of the right proximal femur by plain radiography, and referred to our hospital.



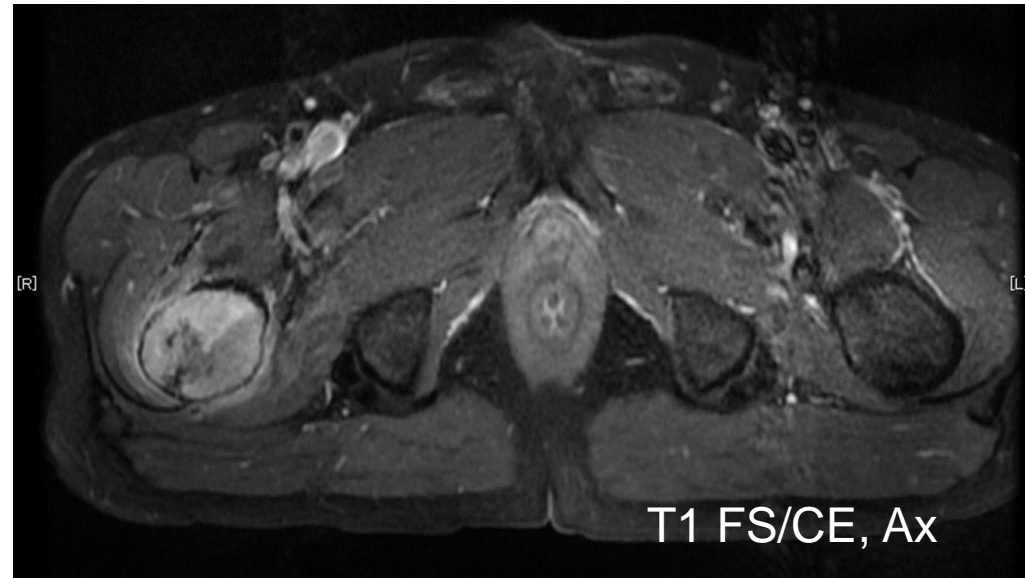
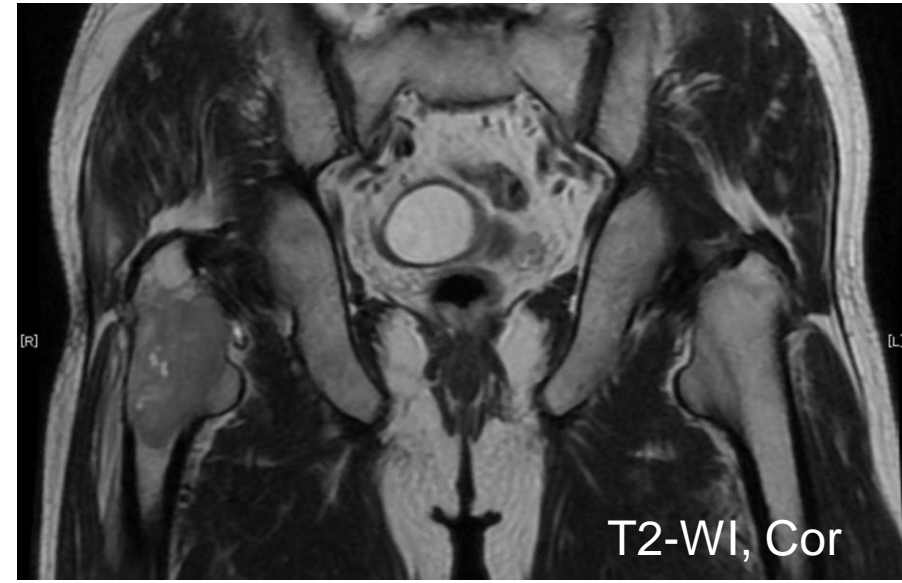
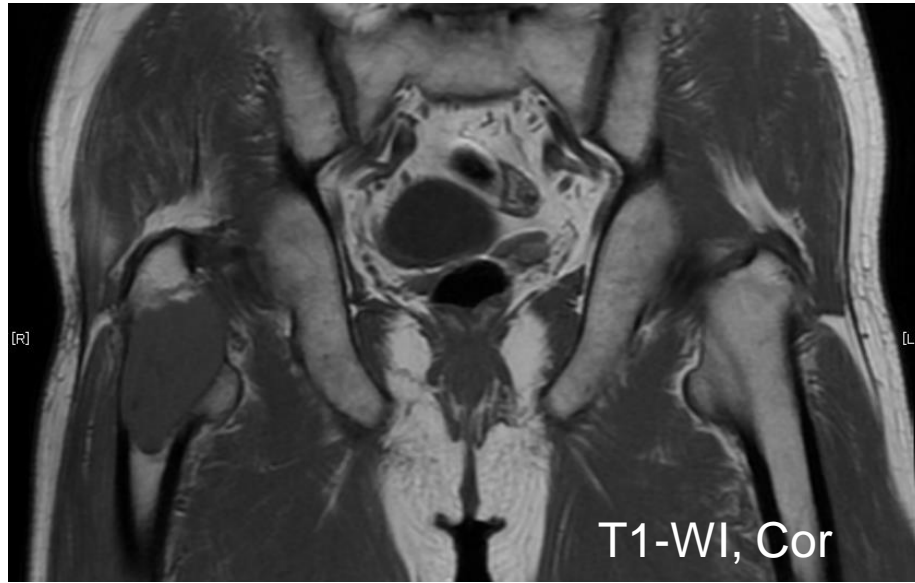
# Plain Radiography



# CT



# Enhanced MRI



# Case 3

# a lesion around the left ulna

Tomohisa Sakai<sup>1</sup> Haruna Yagi<sup>2</sup> Kunihiro Ikuta<sup>1</sup> Yoshie Shimoyama<sup>2</sup>

Hiroshi Urakawa<sup>1</sup> Hiroshi Koike<sup>1</sup> Takeo Fujito<sup>1</sup> Yoshihiro Nishida<sup>1</sup>

Kennosuke Karube<sup>2</sup> Shiro Imagama<sup>1</sup>

1. Orthopedic surgery, Nagoya Univ.
2. Department of Pathology and Laboratory Medicine, Nagoya Univ

43 years old, female

Past medical history: None in particular

Life history: Right-handed

### History of current illness

Oct. 20XX Left forearm pain

May. 20XX+1 Worsened

Jun. 20XX+1 Referred to our Hospital

### Physical findings

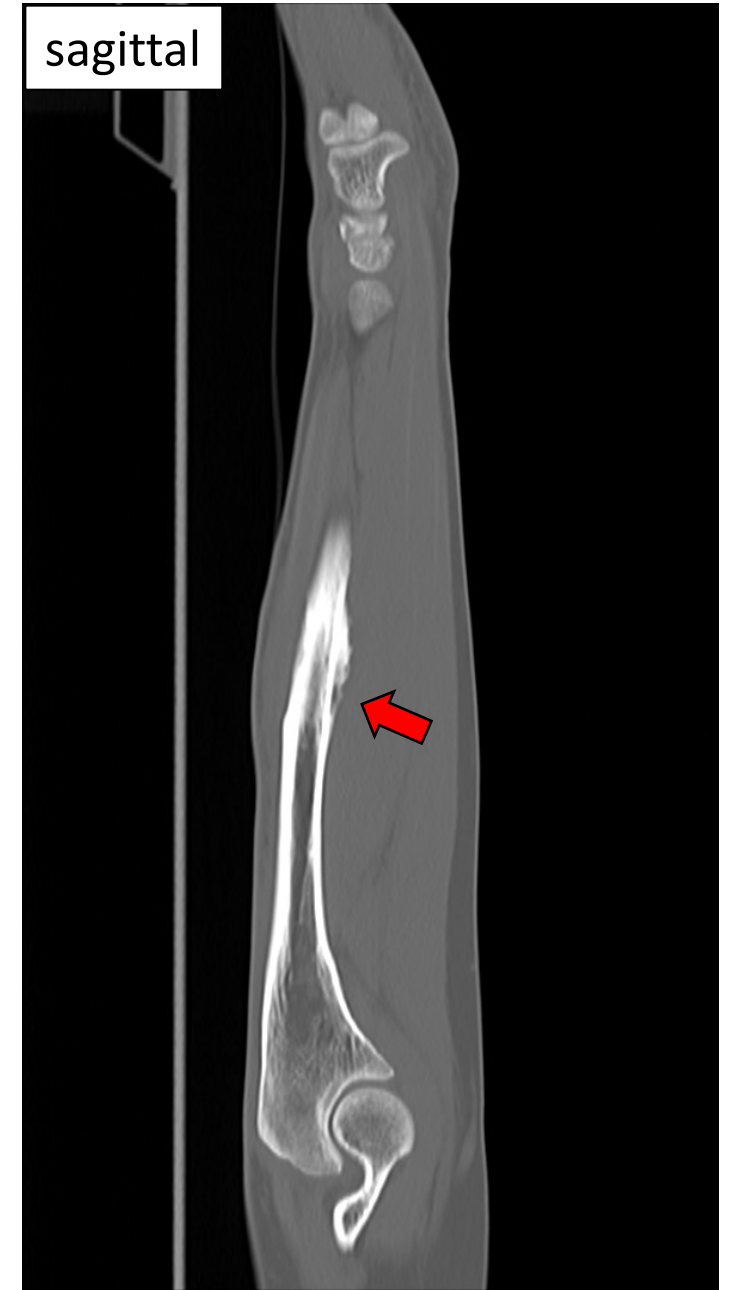
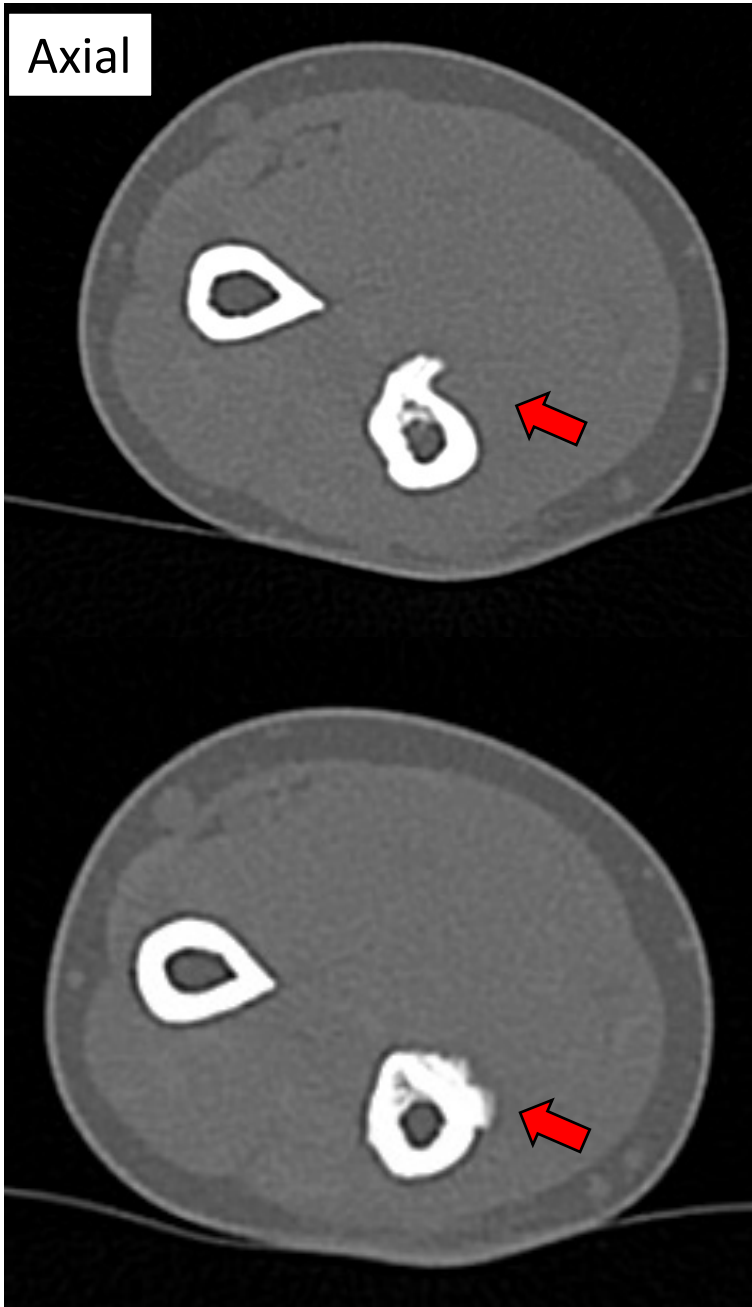
A flat protuberance with tenderness on ulnar side of the left forearm

No restriction in range of motion of the wrist or elbow joint

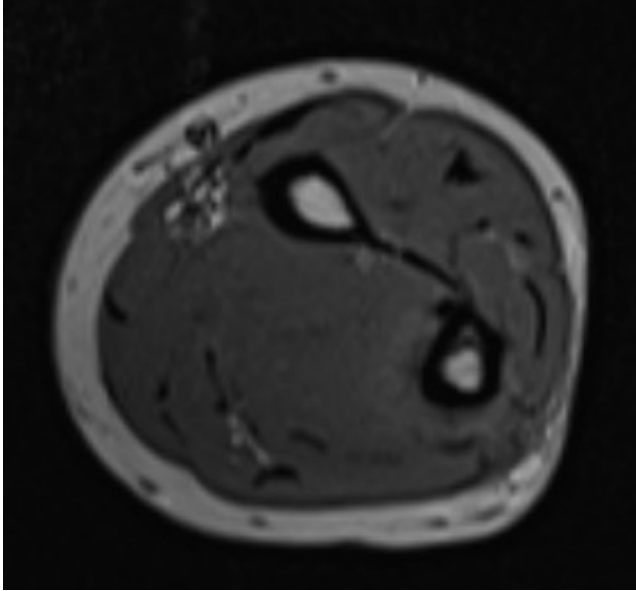
XP



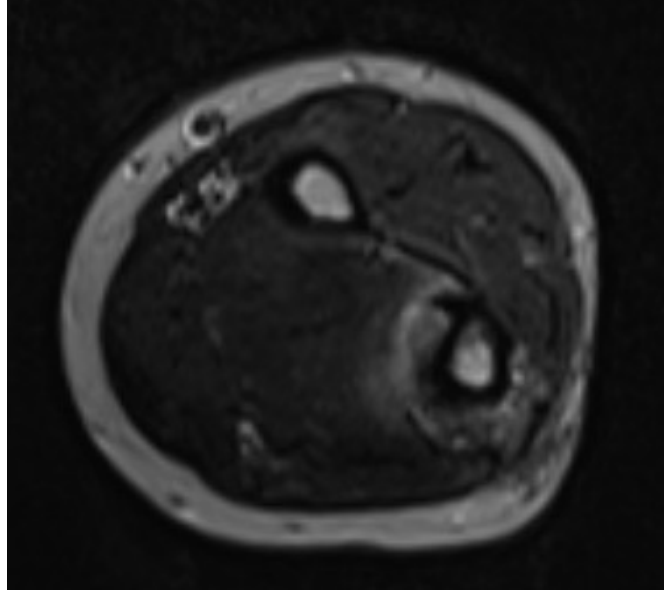
# CT



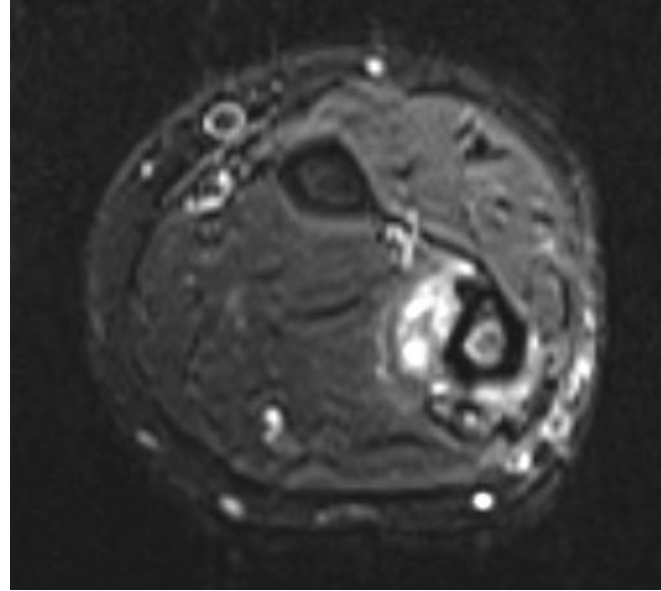
T1 axial



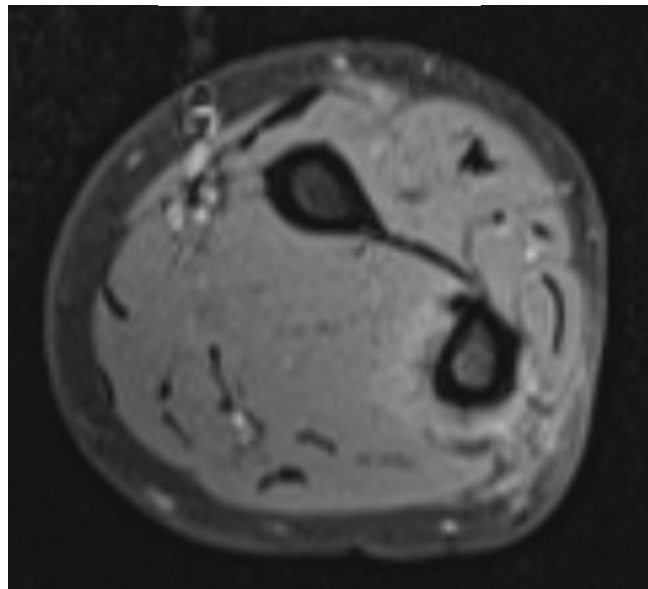
T2 axial



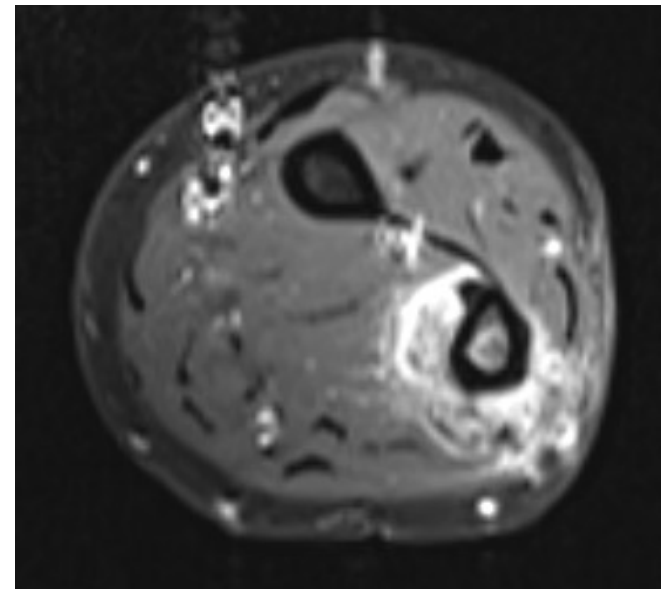
T2 STIR axial



T1 fat-sat axial



T1 fat-sat Gd(+) axial

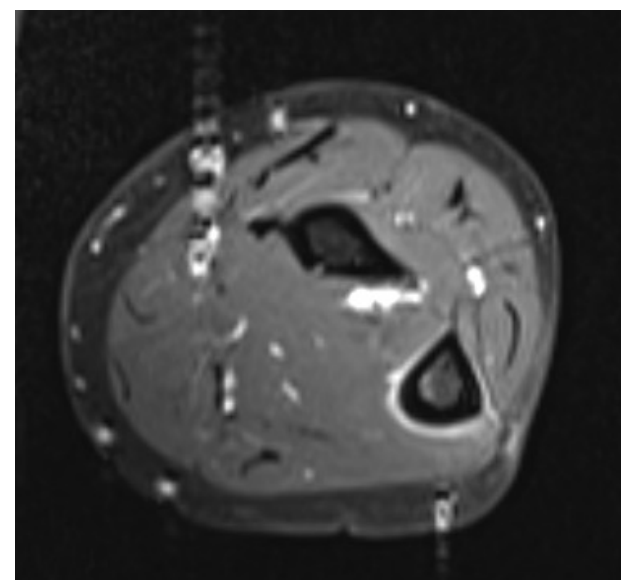
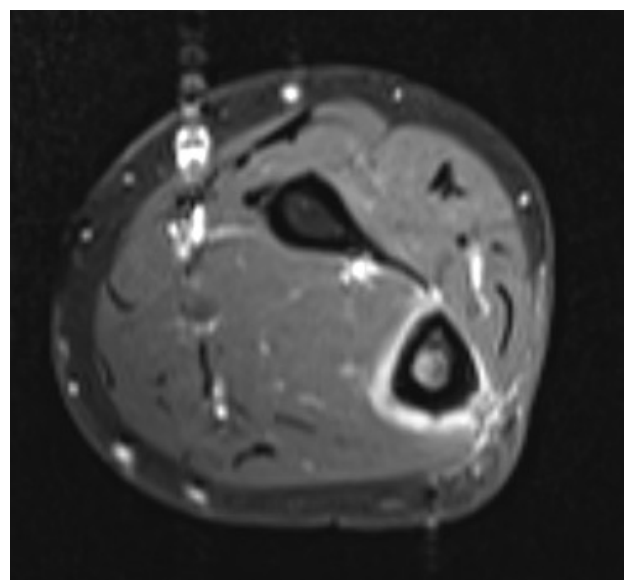
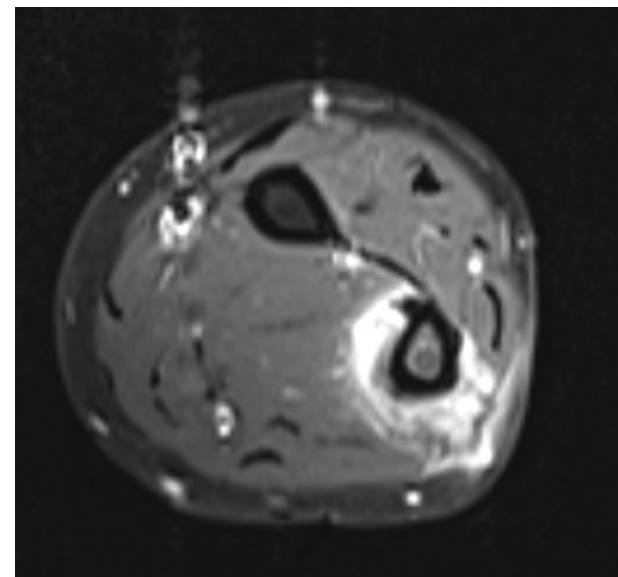
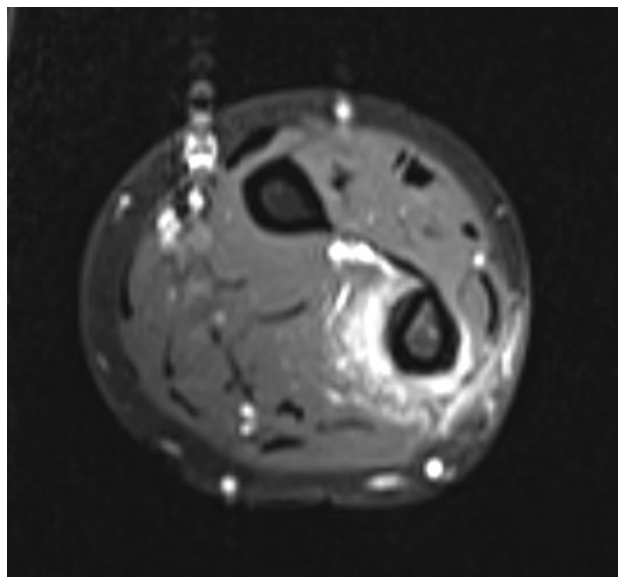
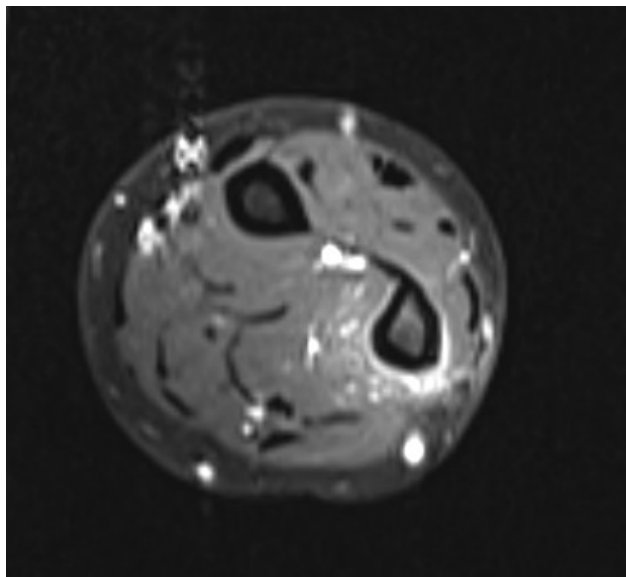


MRI



# MRI T1 fat-sat Gd(+) axial

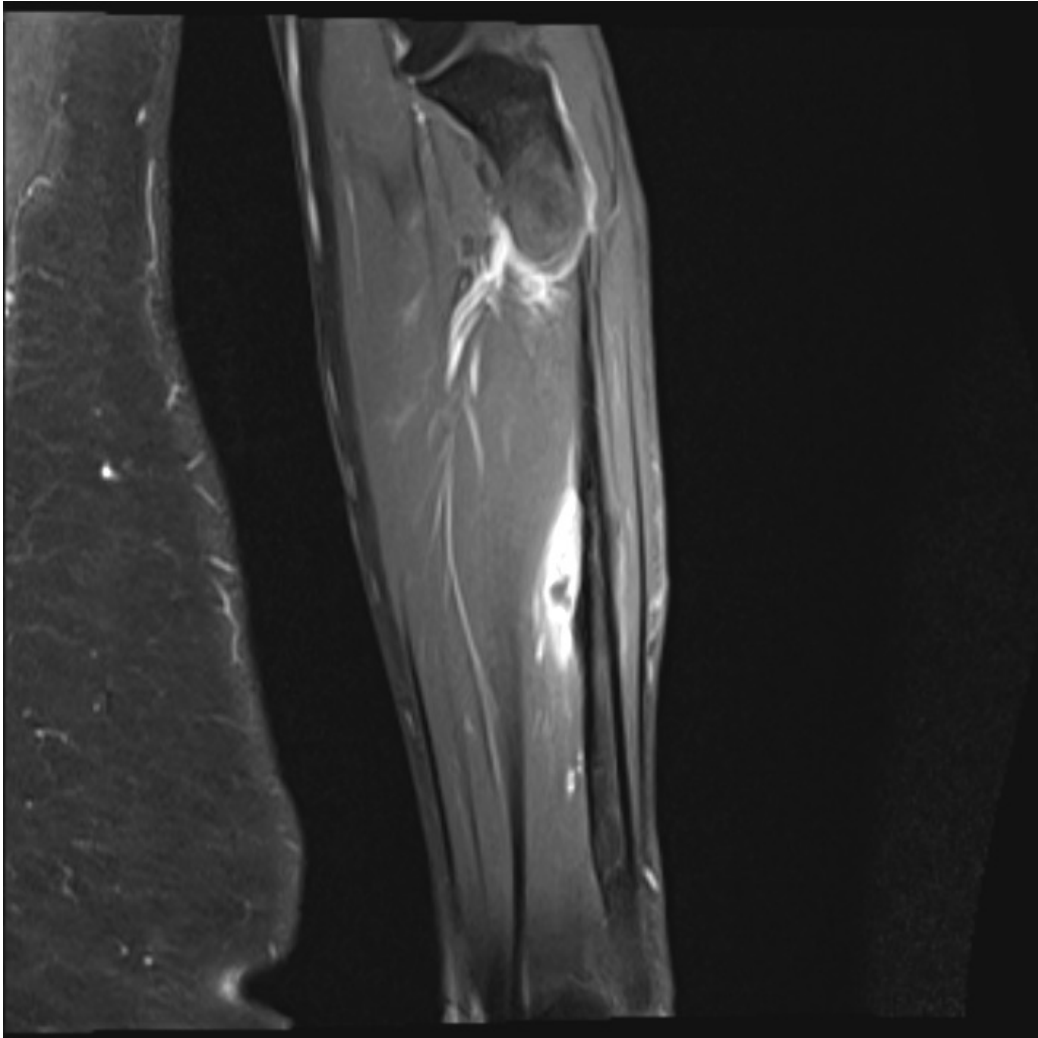
←proximal



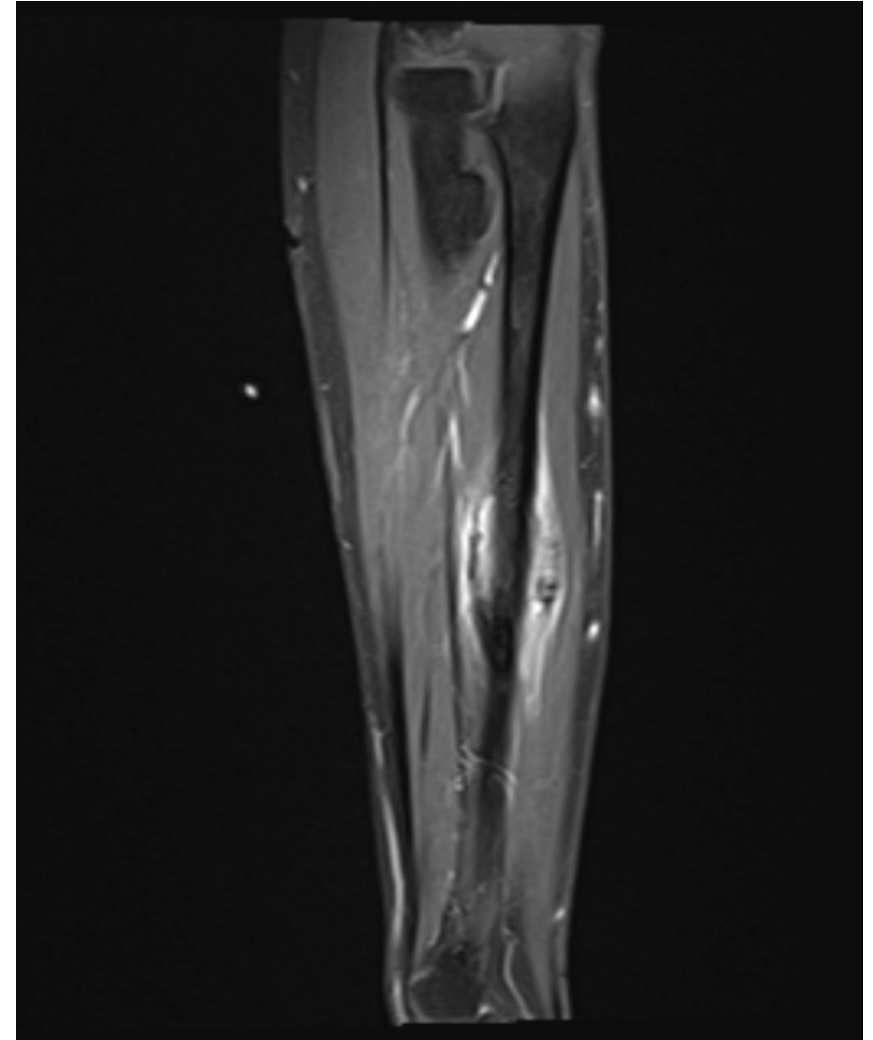
distal→

MRI T1 fat-sat Gd(+) axial

sagittal



coronal



# Case 4

## 15-year-old Female

### Soft Tissue Tumor of the shoulder

Masayuki Morishita<sup>1)</sup>

Makiko Yoshida<sup>2)</sup>

Kenji Kishimoto<sup>3)</sup>

1) Department of Orthopaedic Surgery, Kobe Children's Hospital

2) Department of Pathology, Kobe Children's Hospital

3) Department of Hematology and Oncology, Kobe Children's Hospital

# Chief Complaint:

## Tender mass on the left shoulder

- The patient noticed a mass on the left shoulder three years ago. The mass gradually increased in size and the patient was referred to our department.
- Trauma History: None.
- Past Medical History: None.



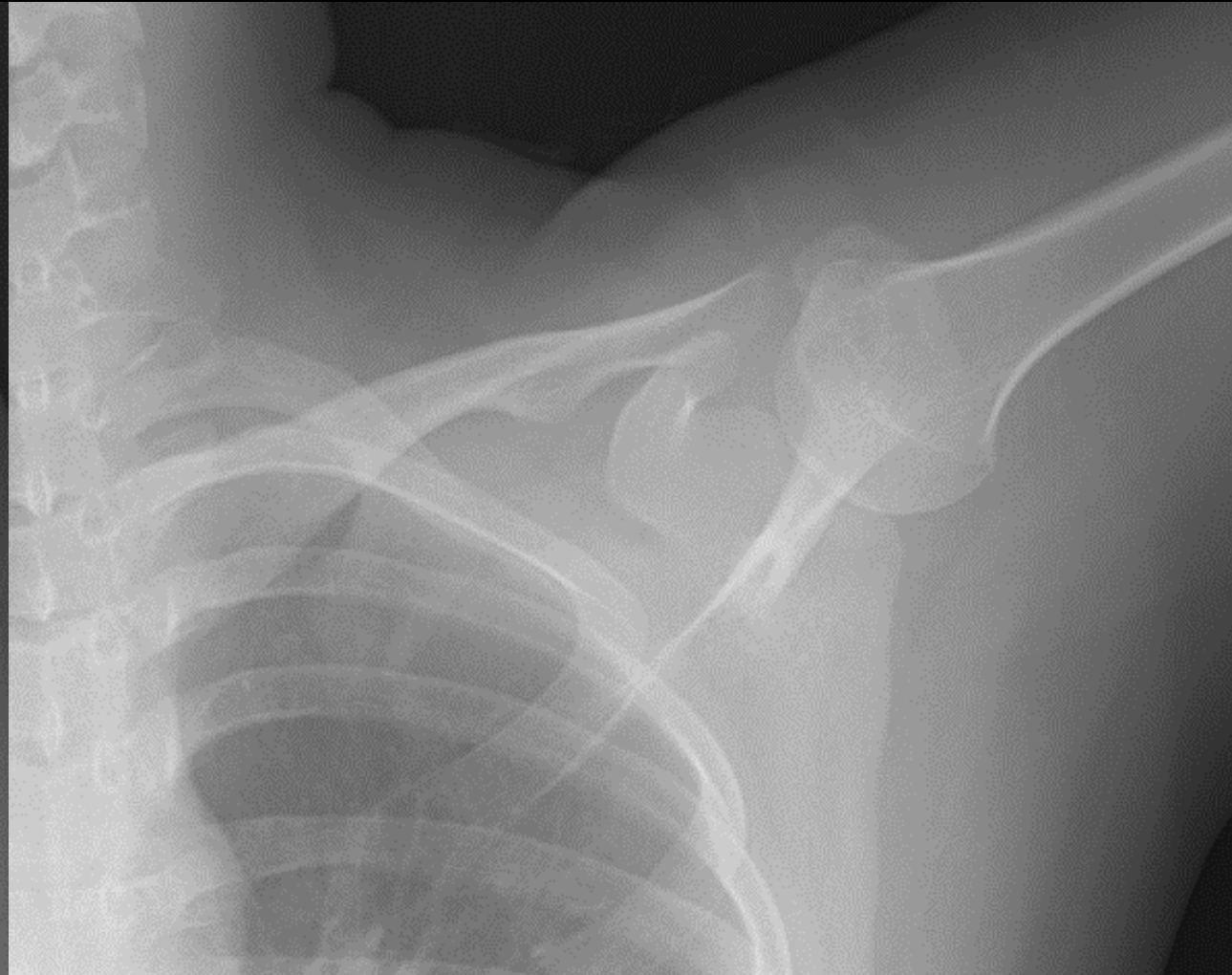
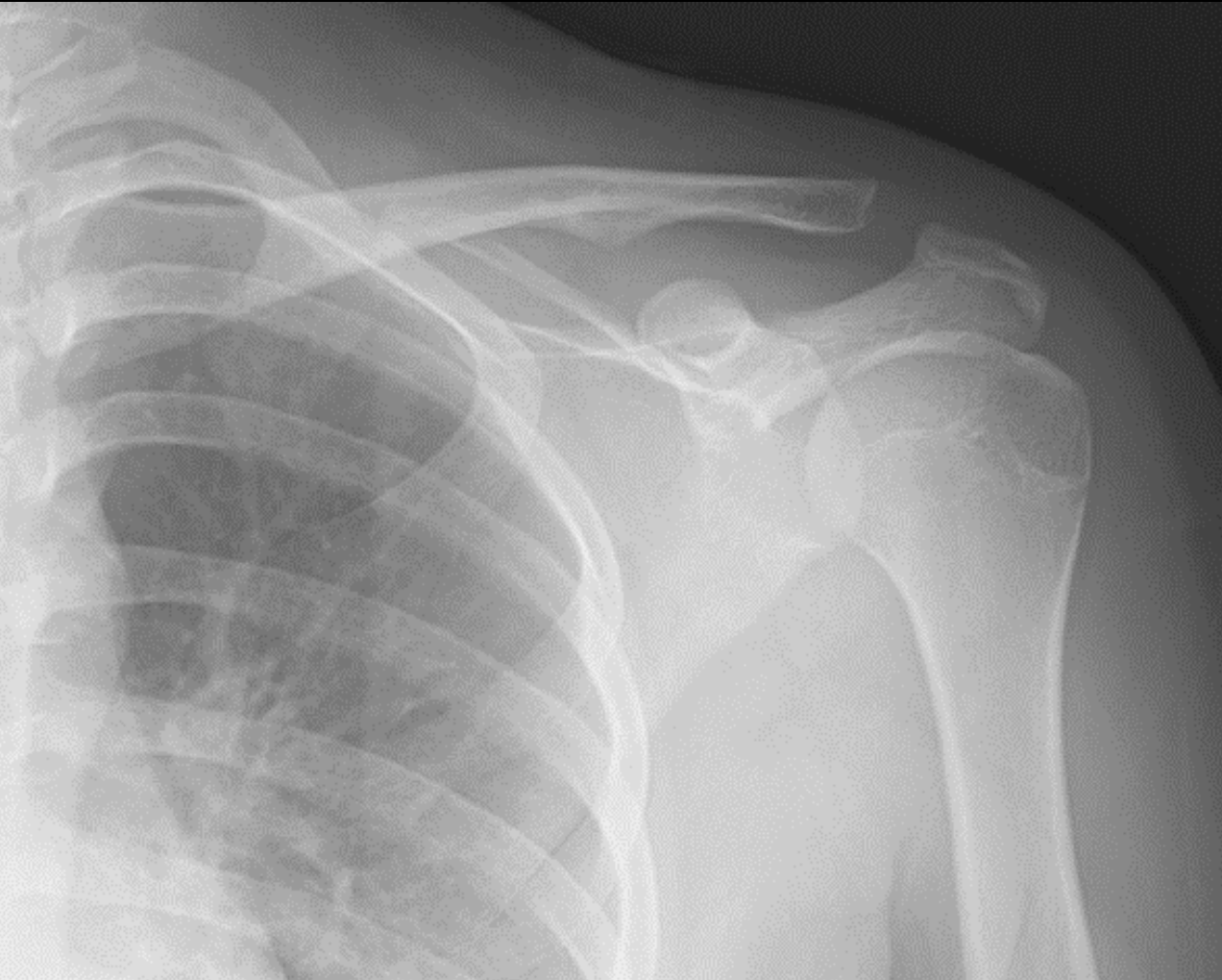
## **Physical Examination:**

- A firm elastic mass 4cm in diameter was palpable from the left shoulder to the anterior chest area.
- Well mobile with deeper tissues.
- No effusion or redness.
- Tinel like sign: Negative.
- No restriction in shoulder joint ROM.

## **Laboratory Findings:**

- Within normal limits.

# X-Ray



# Enhanced CT



# MRI

