

Nádory kolenního kloubu u dětí

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**FAKULTNÍ
NEMOCNICE
BRNO**

WHO klasifikace kostních nádorů, nádorům podobných lézí a kostních pseudotumorů

Nádory kostitvorné

A.Benigní:

1. Osteom
2. Osteoid osteom-osteoblastom

B.Intermediární:

1. Agresivní „maligní“ osteoblastom

C.Maligní:

Osteosarkom (OSA)

Konvenční (klasický) OSA

osteoblastický 50%

chondroblastický 25%

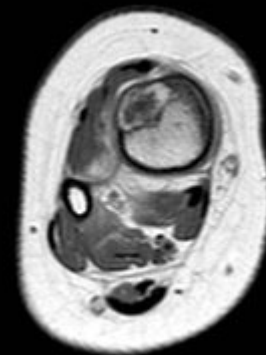
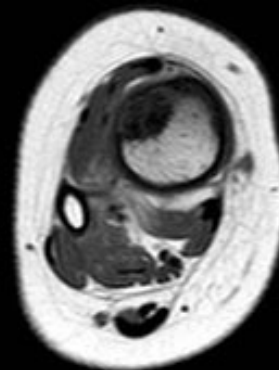
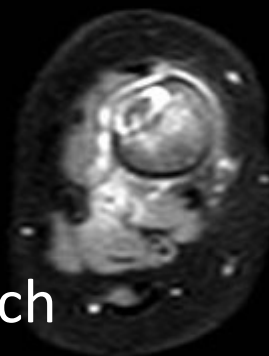
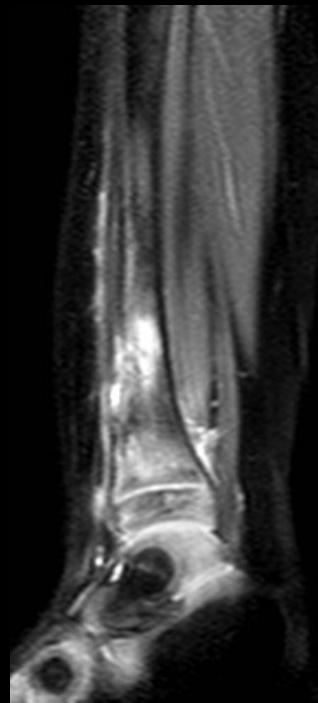
fibroblastický

teleangiektatický (cystický) 3%

„small cell“ (podobný ES)

povrchový OSA parosální

periostální



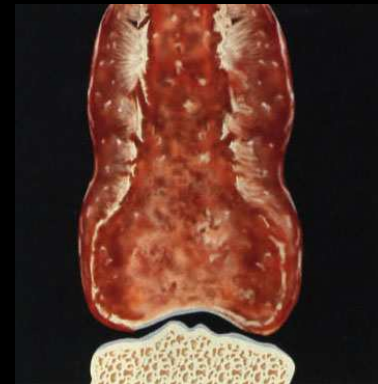
Osteoid osteom, věk: 2 roky, hoch

OSTEOSARKOM

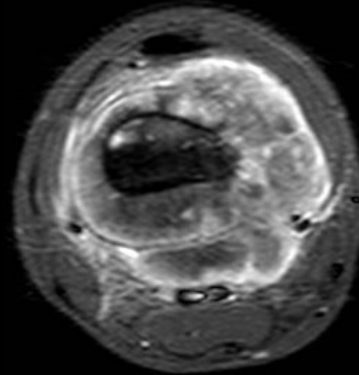
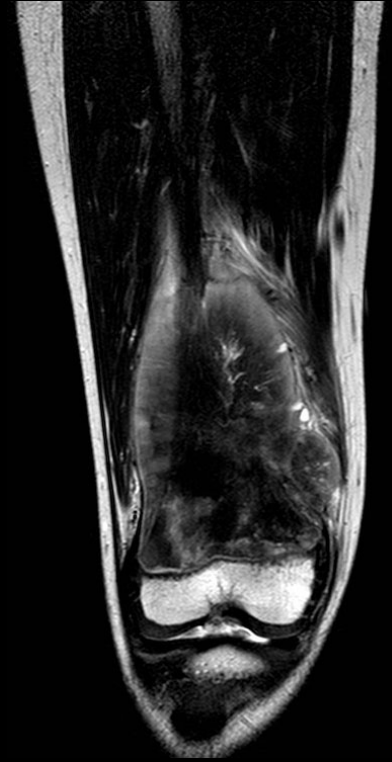
nejčastější maligní nádor (5,6 na 1 milion dětí do 15
roků) 5% tumorů v dětském věku

2 vrcholy: 10-25 roků, 50-70 roků

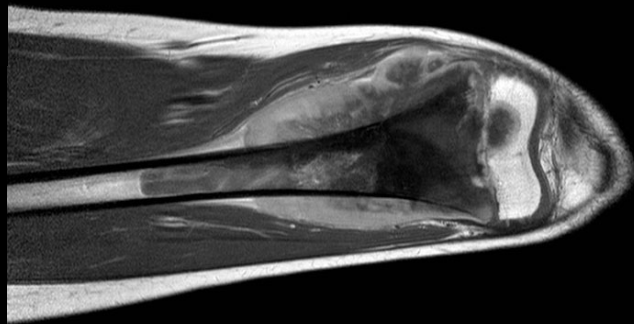
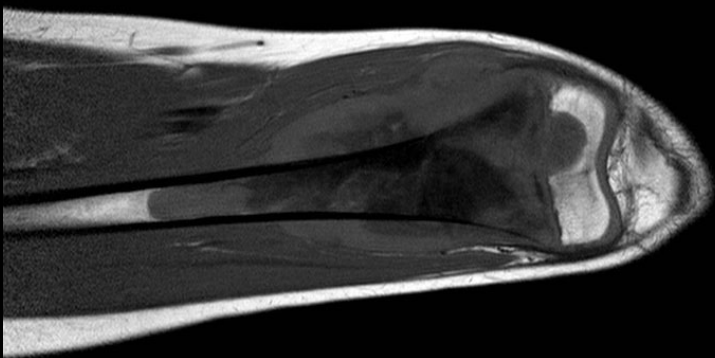
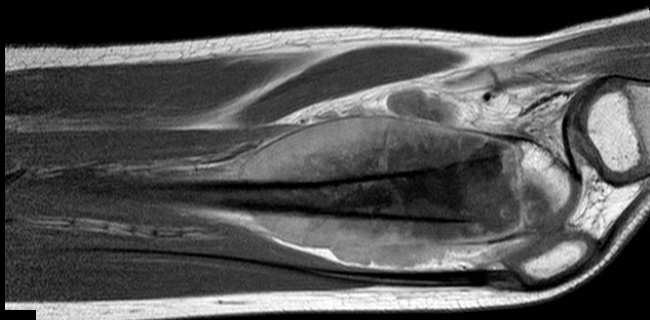
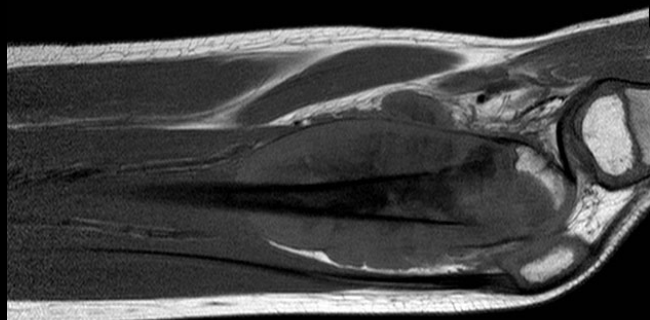
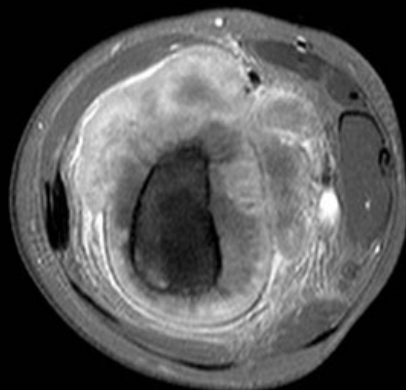
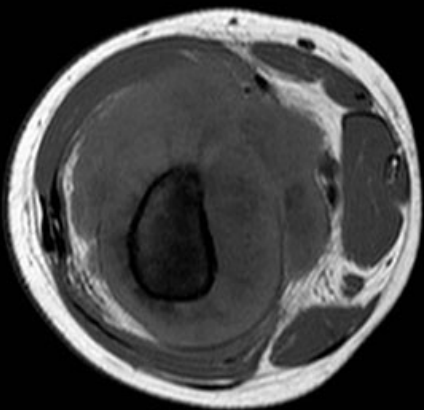
klin: bolest a otok okolo kloubu, v anamnéze úraz je
často úraz, noční bolesti bez vazby na pohybové
aktivity, bolest nikoliv v kloubu, ale v oblasti
metafýzy, po přerušení kortikalis
se bolest zmírní



R
ap

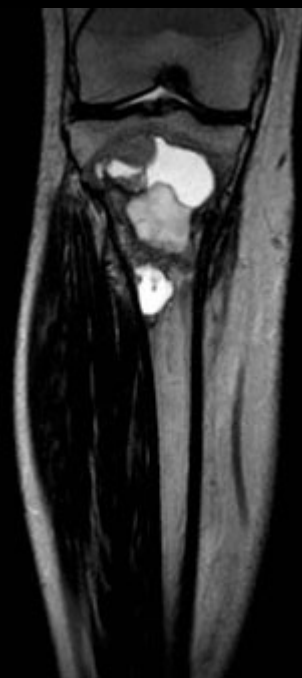
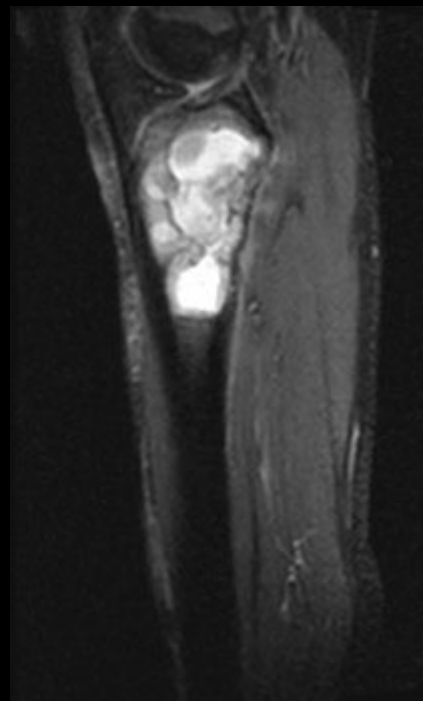


Osteosarkom, věk :17 roků

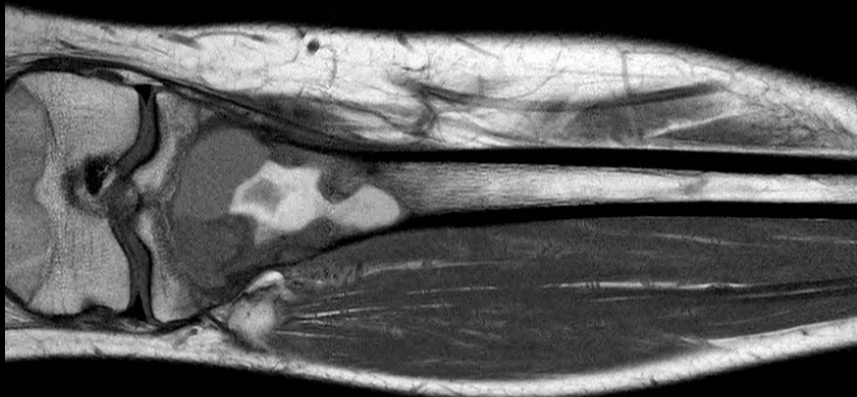
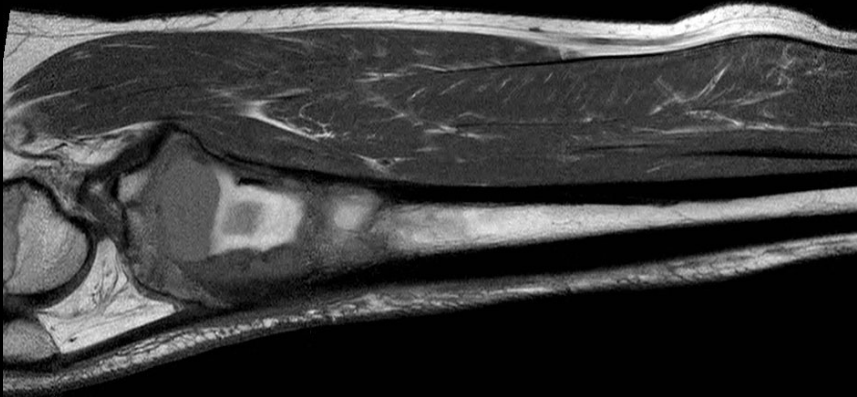
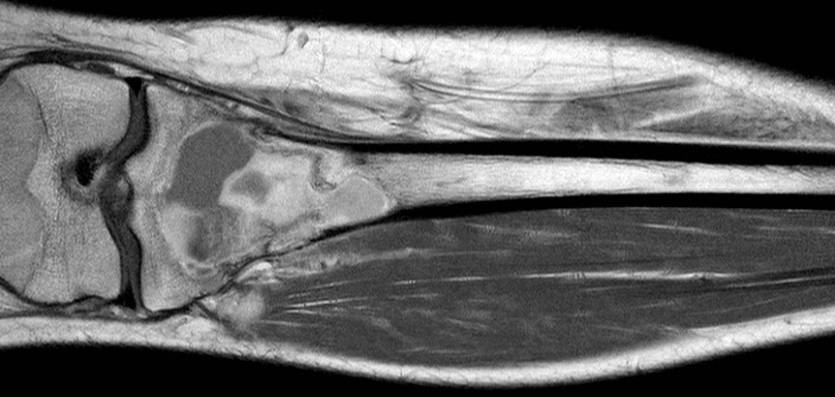
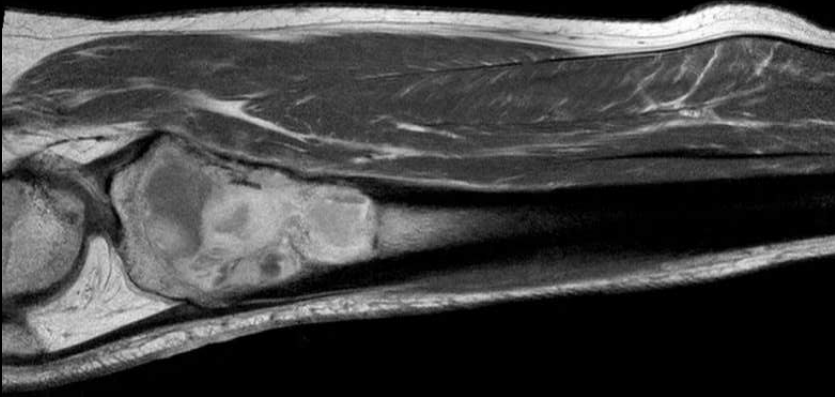




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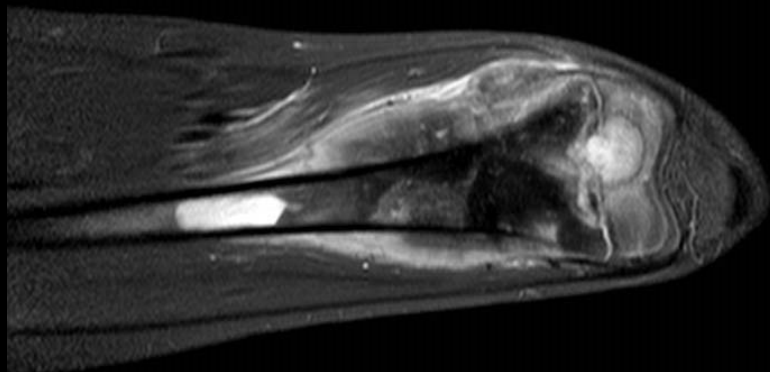
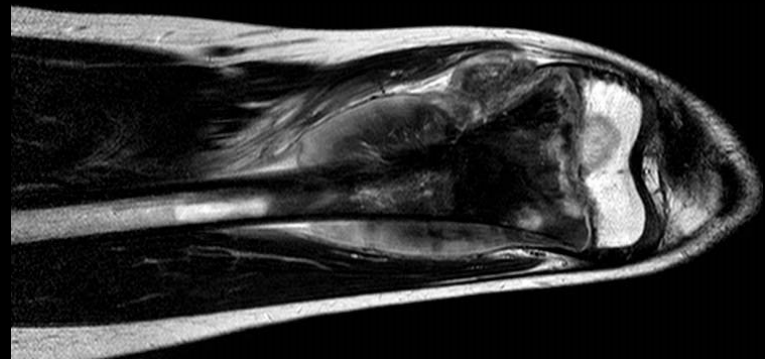
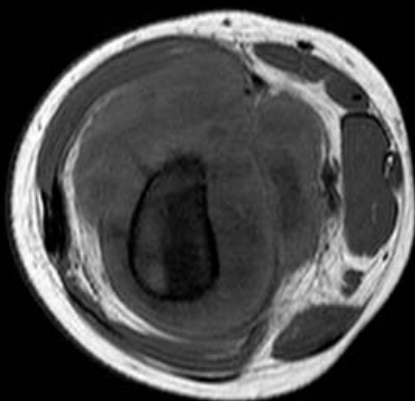
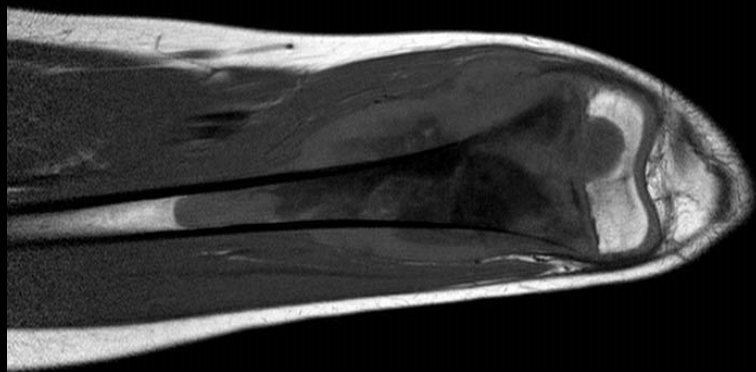
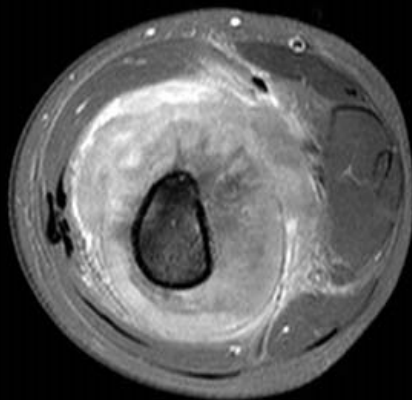
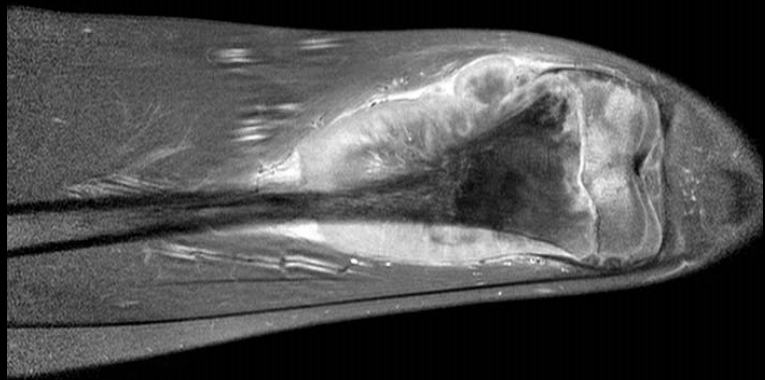


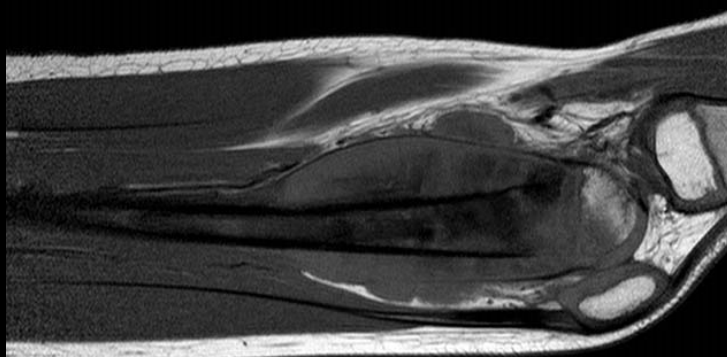
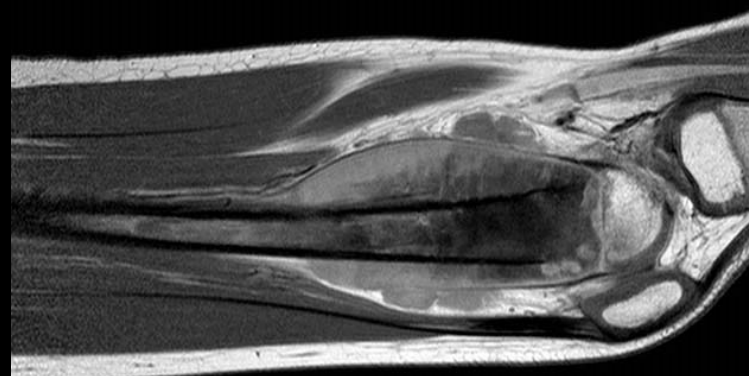
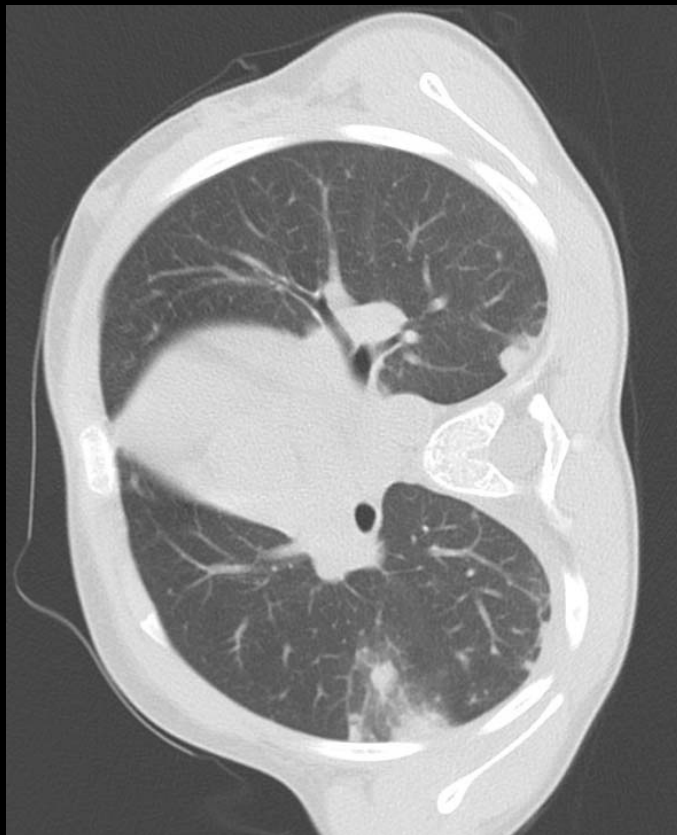
Teleangiektatický osteosarkom
hoch, věk:16 roků

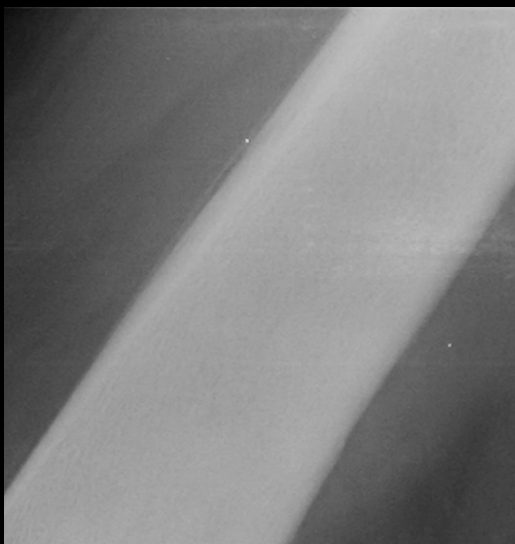




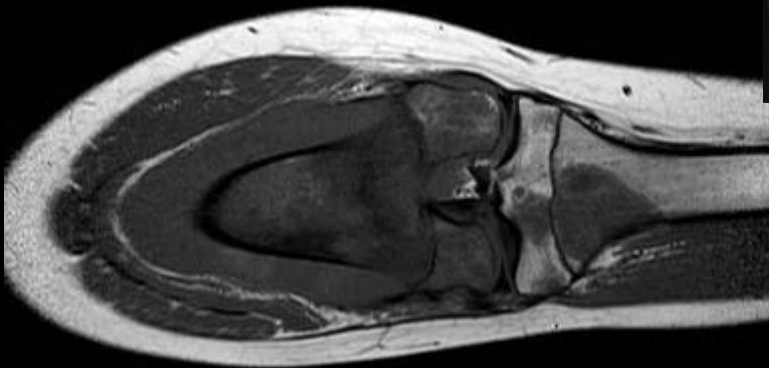
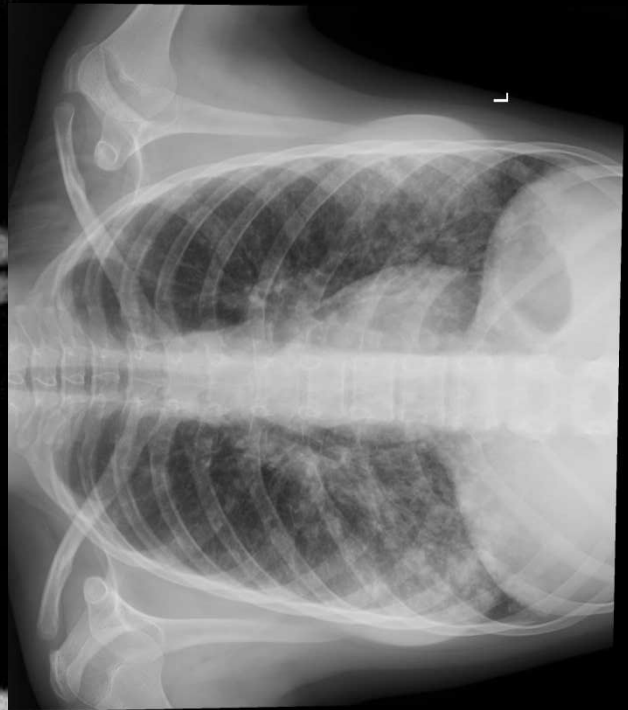
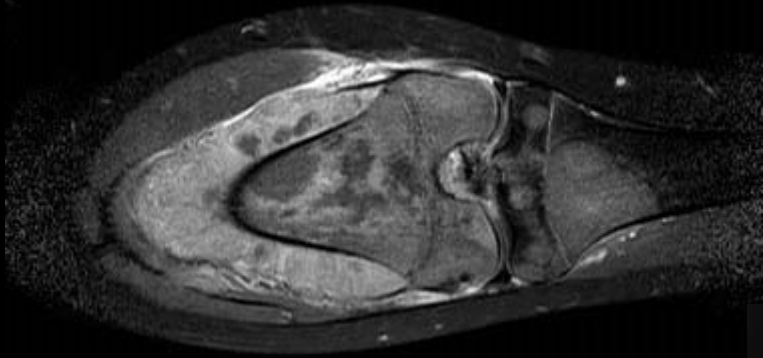
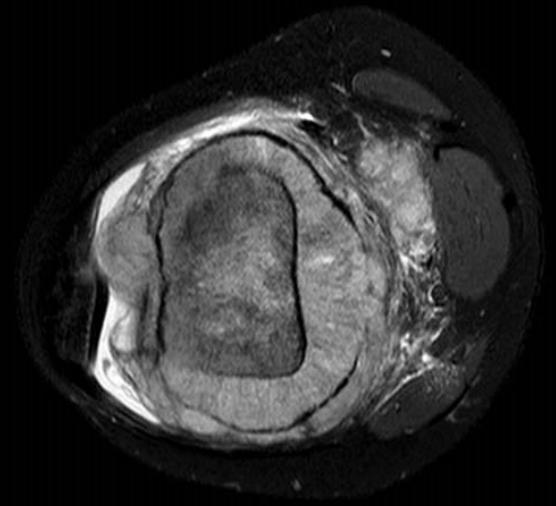
Osteosarkom, dívka, věk: 17 roků







Osteosarkom, dívka, věk: 14 roků



WHO klasifikace kostních nádorů, nádorům podobných lézí a kostních pseudotumorů

Nádory chondrogenní

A. Benigní:

1. Chondrom

- Enchondrom

- Periostální chondrom

2. Osteochondrom

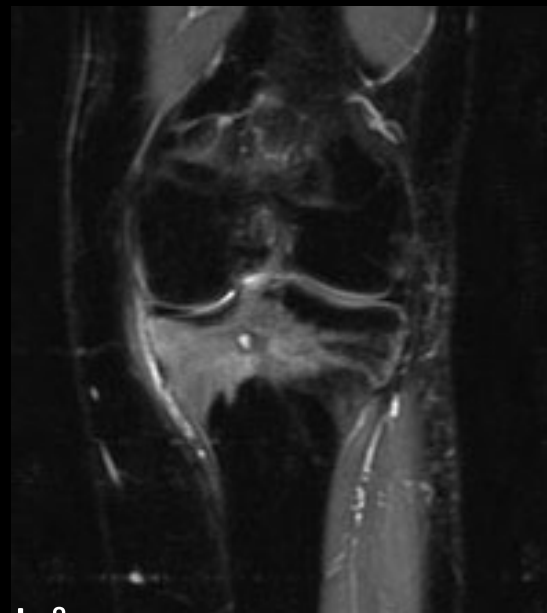
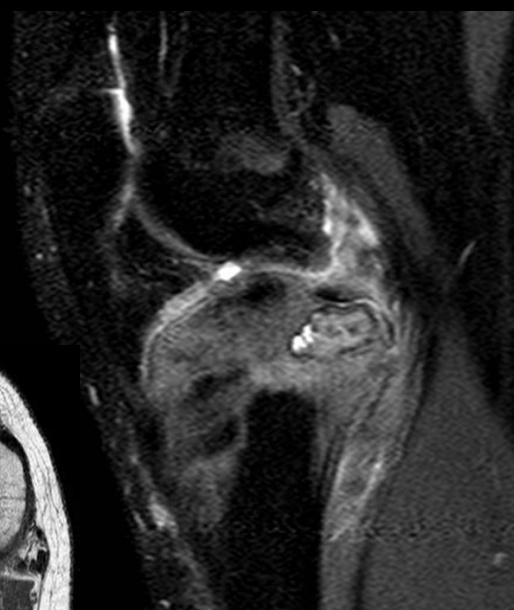
(kartilaginozní exostóza)

solitární

mnohotné (dědičně vázané
Ollier)

3. Chondroblastom

4. Chondromyxoidní fibrom

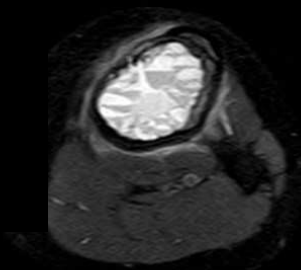


Chondroblastom , hoch, věk:17 roků

OBROVSKOBUNĚČNÝ NÁDOR

OBN

Benigní nádor



OBN, dívka, věk: 15 roků

WHO klasifikace kostních nádorů, nádorům podobných lézí a kostních pseudotumorů

Dřeňové nádory:

Ewing's sarcoma family of tumors

Maligní lymfom
(primární, sekundární)

Myelom

EWING'S SARCOMA FAMILY of TUMORS

Medulogenní nádor

(„small round blue cells“)

Ewingův sarkom -kostní původ

Extraosální Ewingův sarkom

Periferní primitivní neuroektodermální tumor (PNET)



EWINGŮV SARKOM

2.nejčastější maligní kostní nádor

2.dekáda (64%), 1.dekáda (27%), 3.dekáda (9%)

klinický nález: teplota, únava, systémové onemocnění

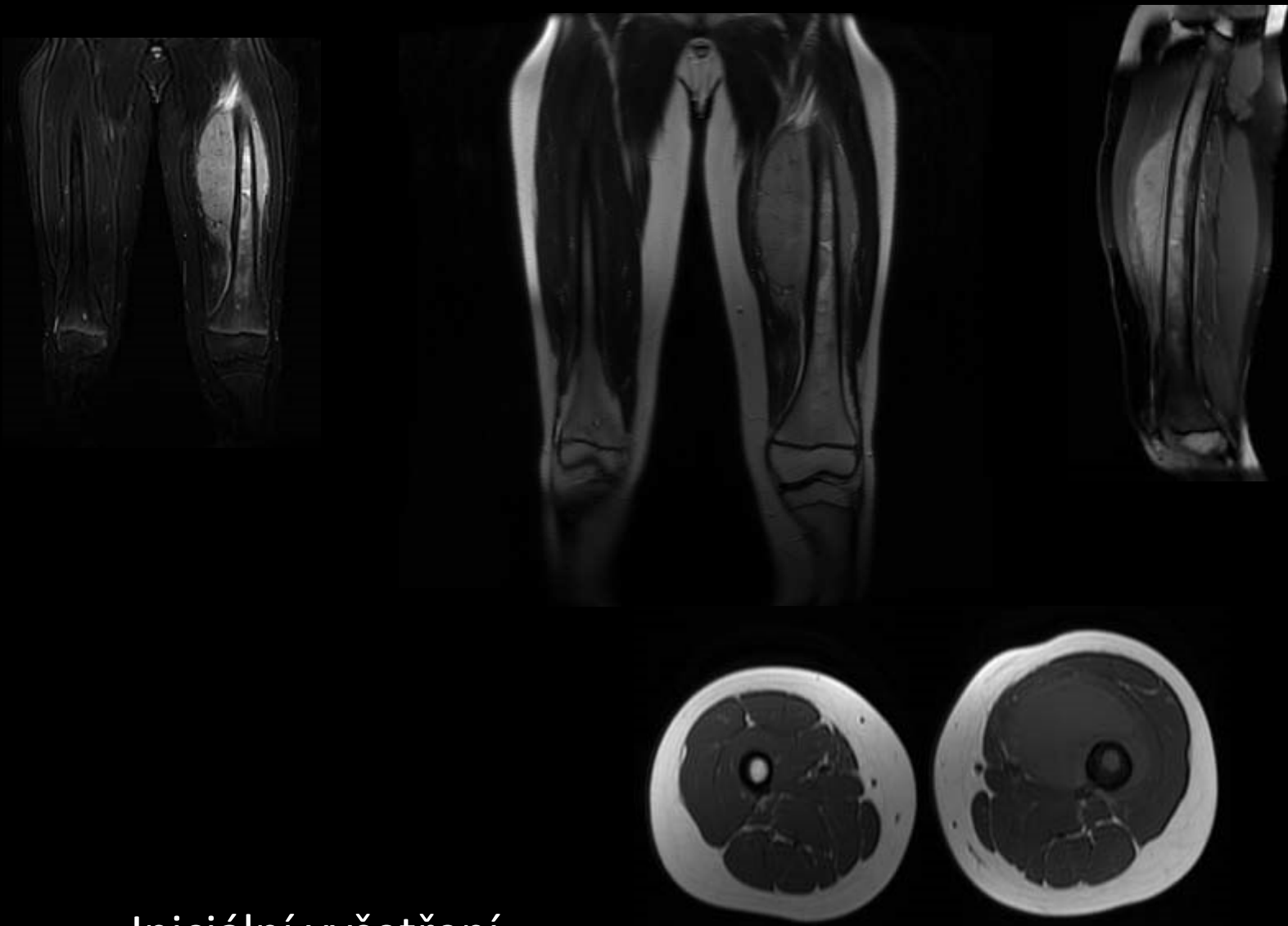
lokalizace: diafýza (metafýza), femur, fibula, axiální skelet (pánev, skapula, páteř)

biopsie

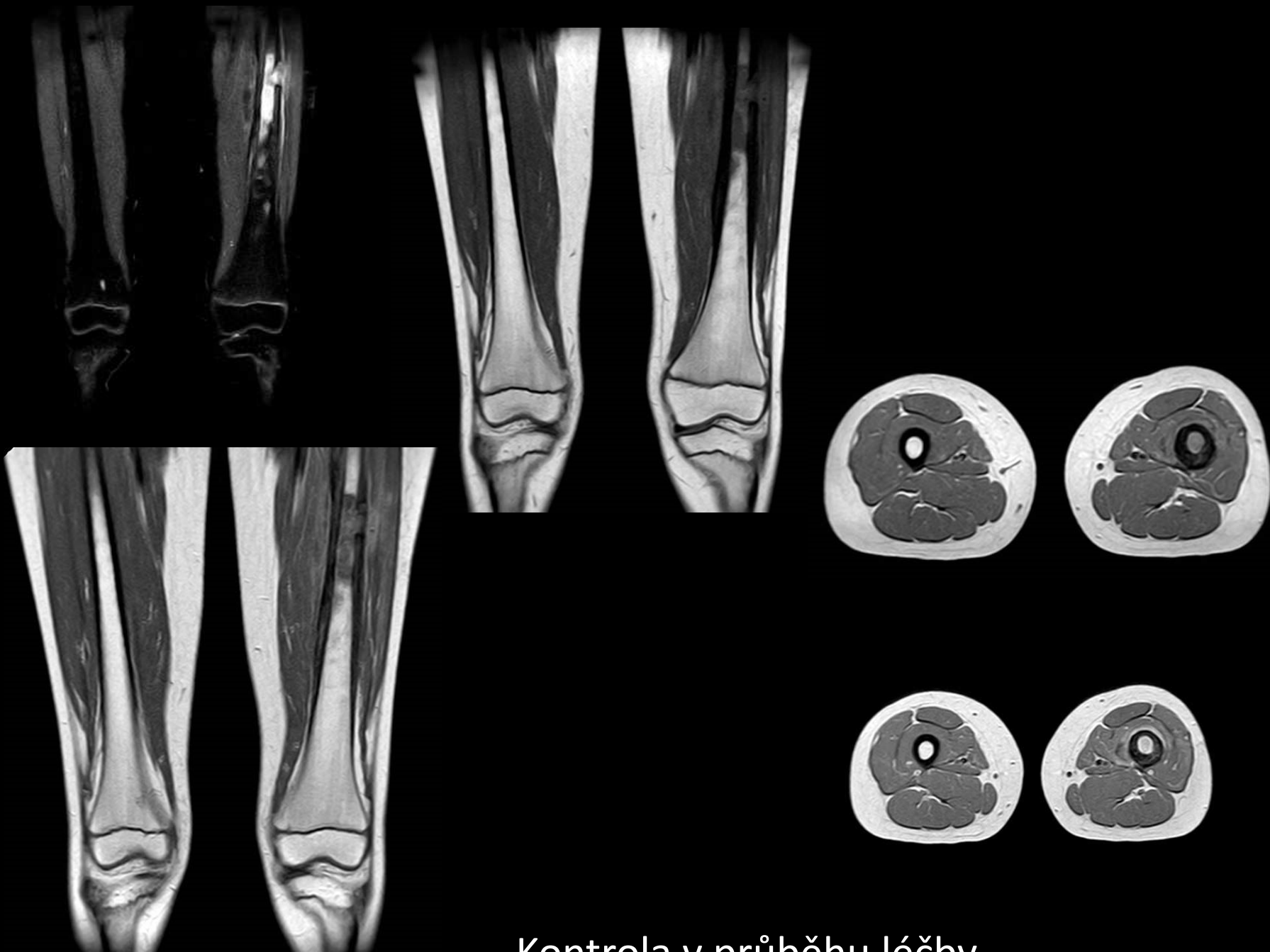
cytogenet.vyš.: translokace dlouhého raménka 2 chromozomů $t(11;22)$



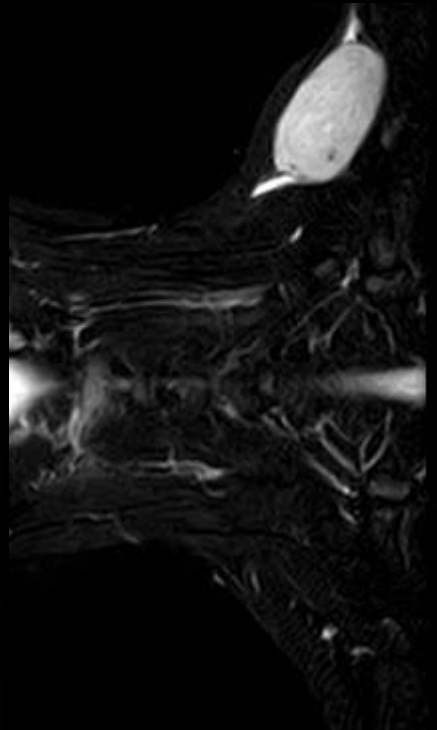
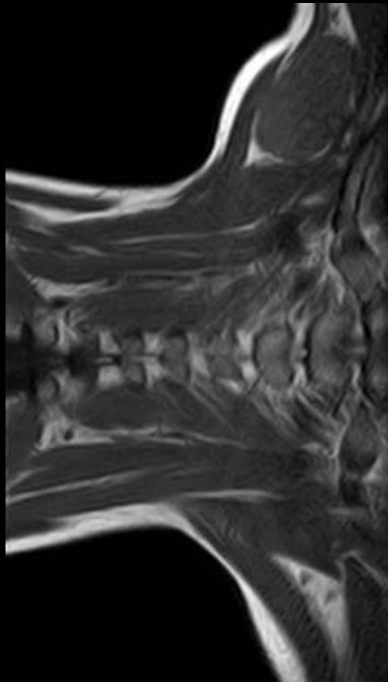
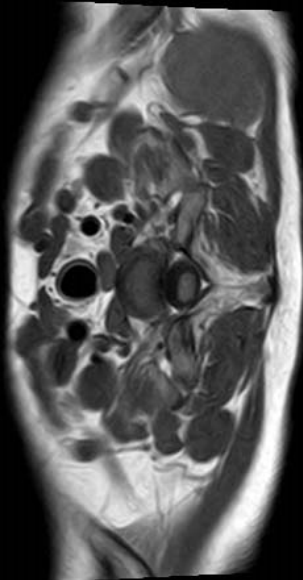
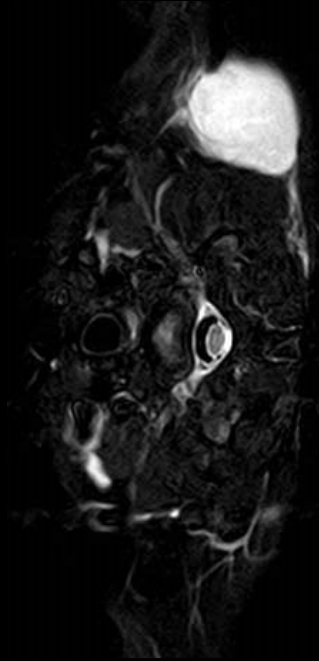
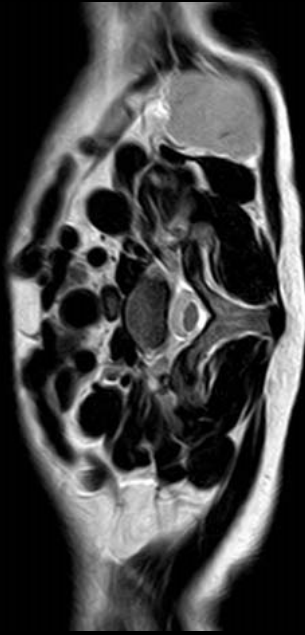
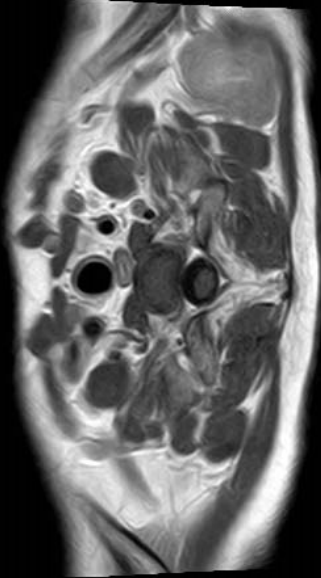
Diagnoza v 11 letech, kontrola za 2 roky, hoch

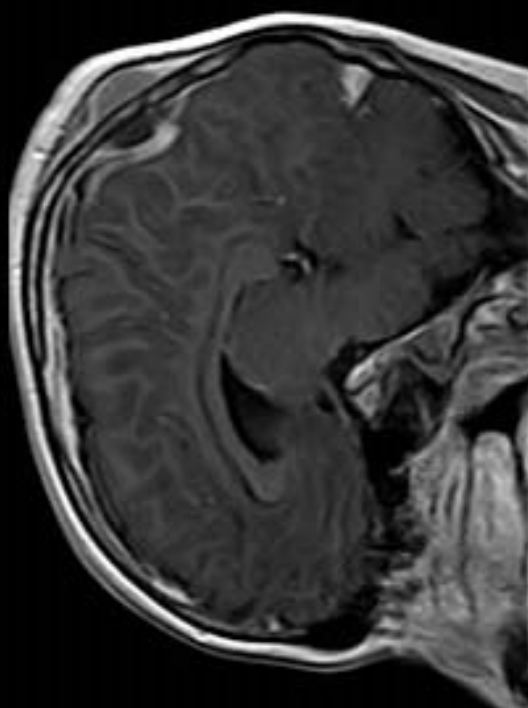
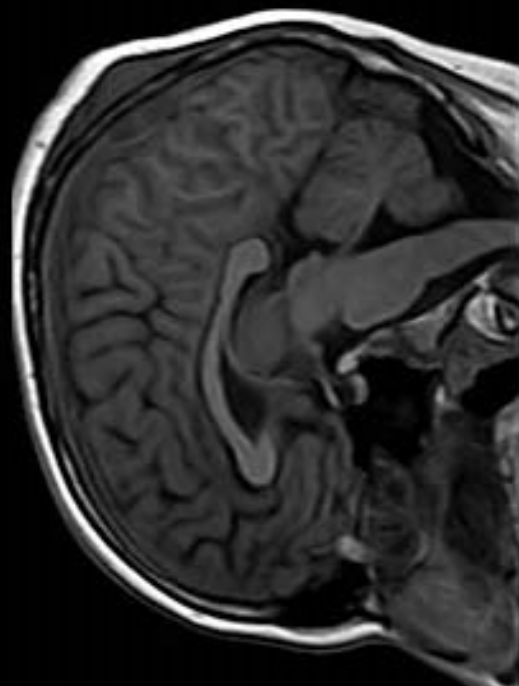
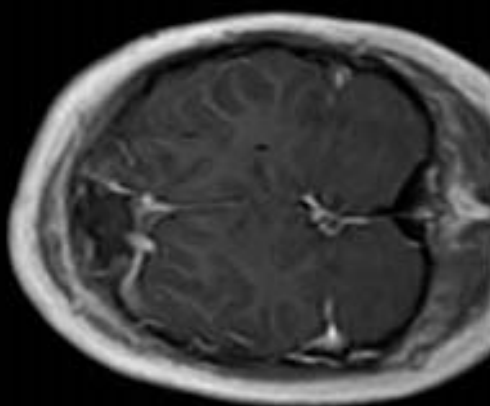
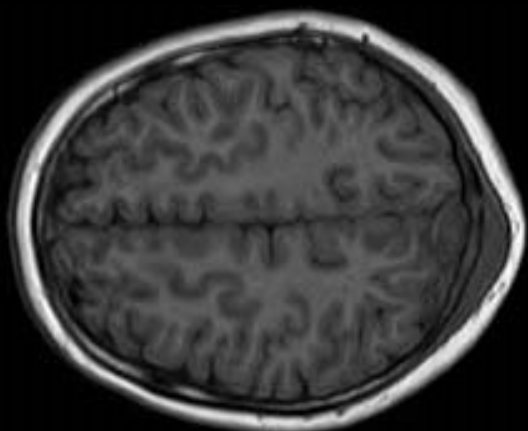
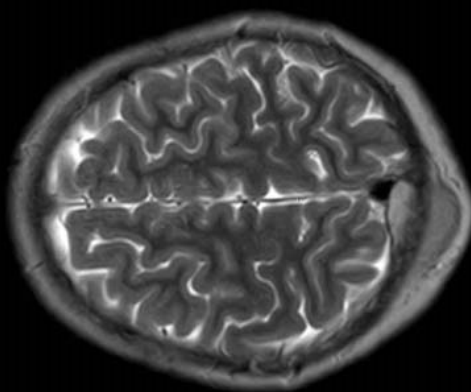
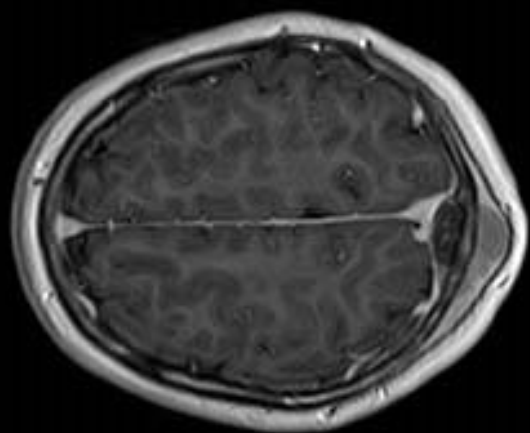


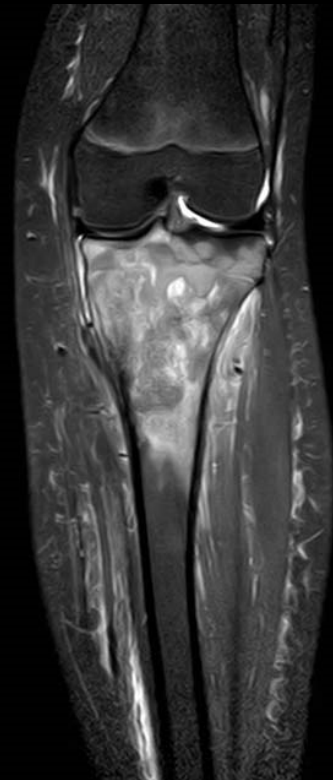
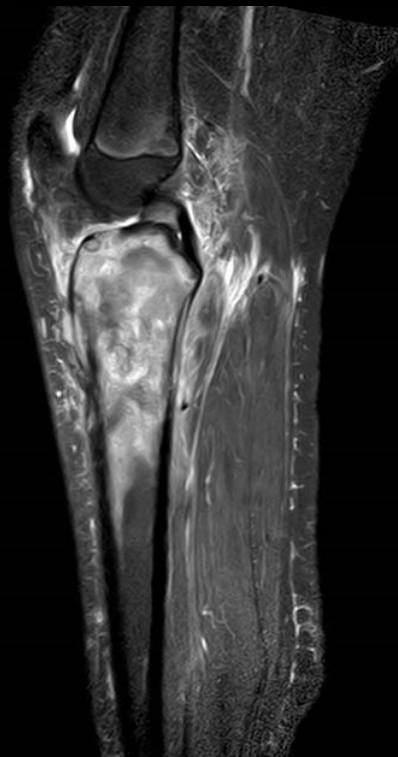
Iniciální vyšetření



Kontrola v průběhu léčby

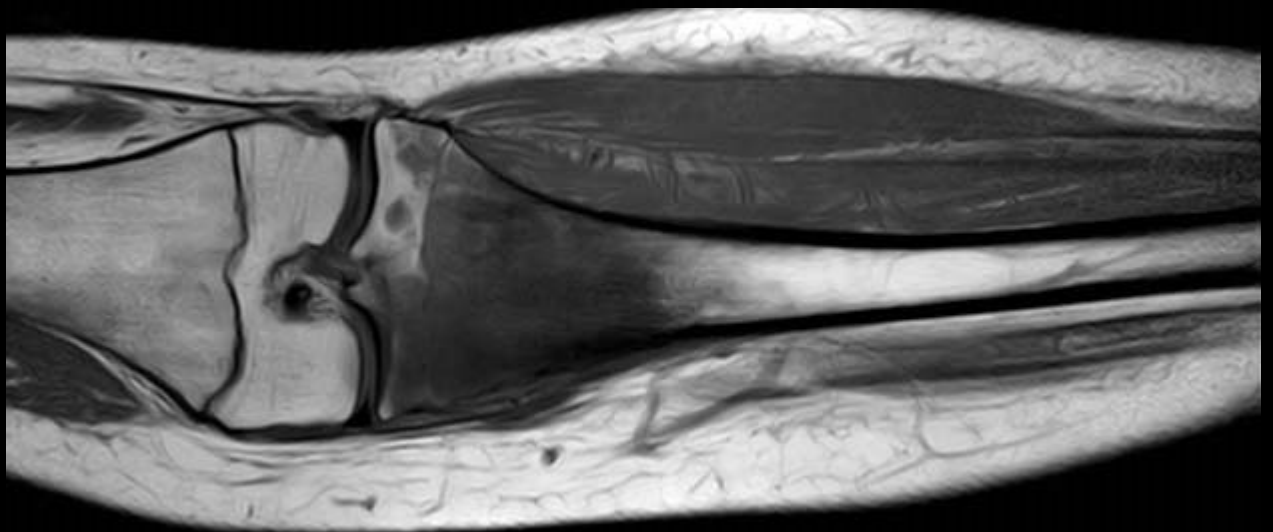
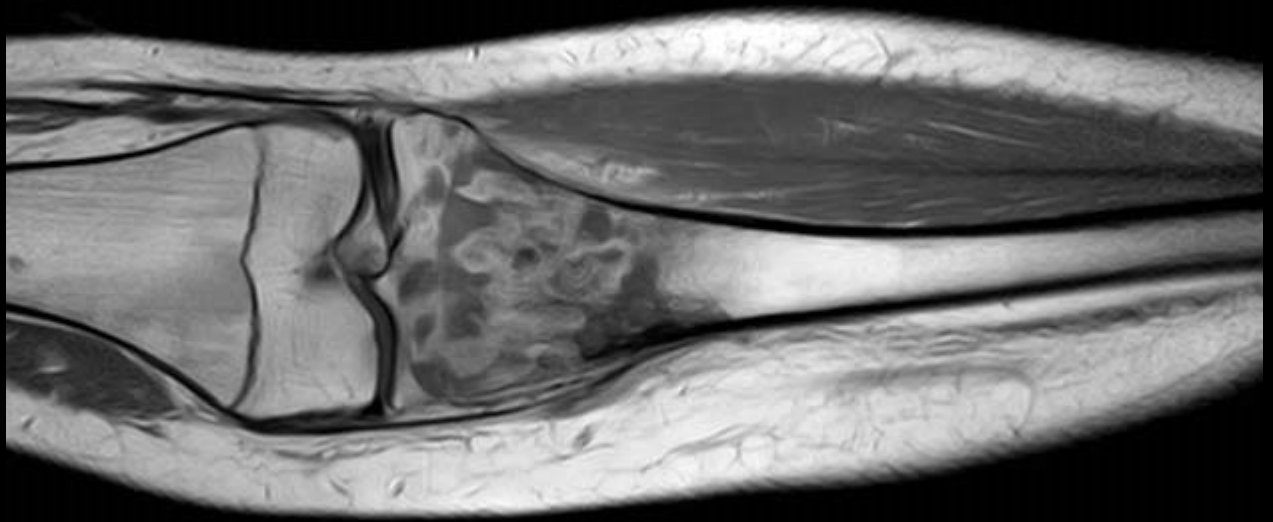
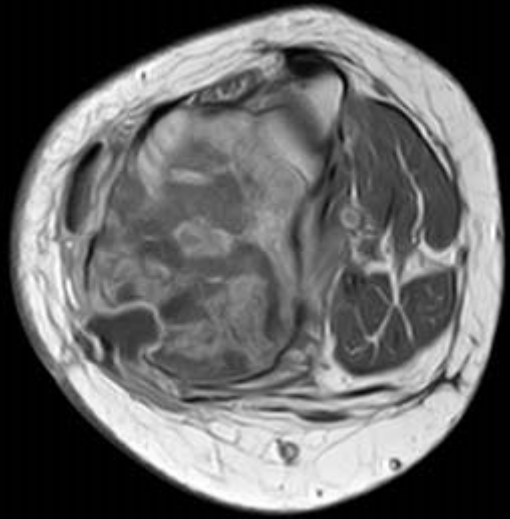
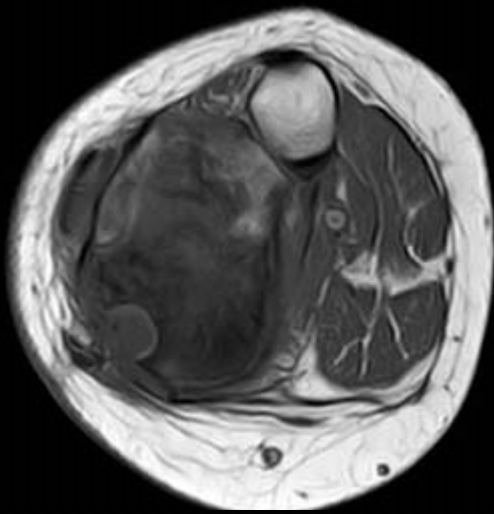






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Věk: 13 roků, dívka



WHO klasifikace kostních nádorů, nádorům podobných lézí a kostních pseudotumorů

Nádorům podobné afekce

1. Fibrozní metafyzární defekt

2. Periostální desmoid

3. Fibrozní dysplázie

4. Prostá kostní cysta

5. Aneuryzmat. kostní cysta

6. Ganglion juxta a intraos.

7. Histiocytóza

8. Hnědý nádor

(u hyperparathyreoidismu)

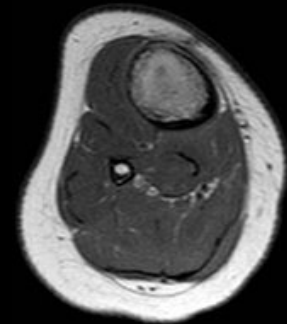
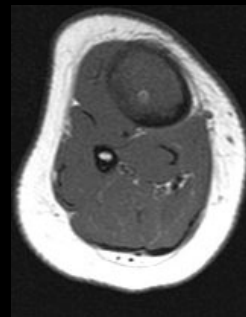
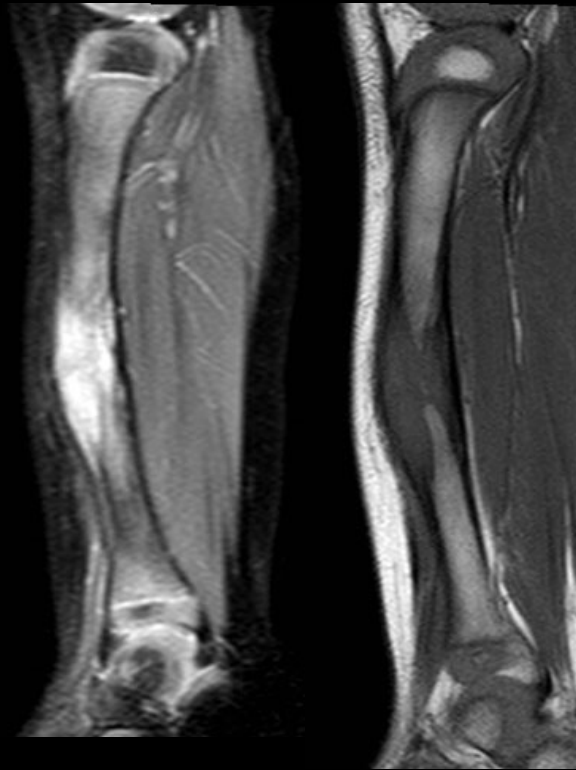
9. Reparat. obrovskobun.
granulom

10. Myositis ossificans

11. Vilonodulární synovitis

12. Tumorif. změny u pustulozní
artroosteitidy

13. Pseudotumory



Adamantinom tibie, dívka, věk: 2 roky

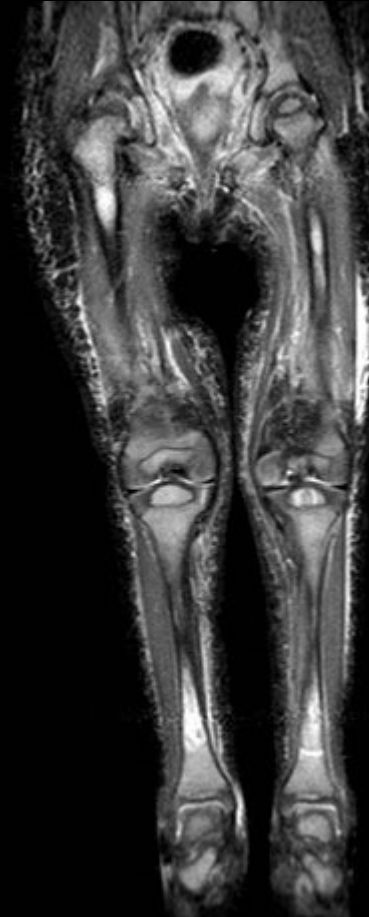
Metastatické postižení kostí

Neuroblastom



Leukémie

Medulloblastom, nefroblastom



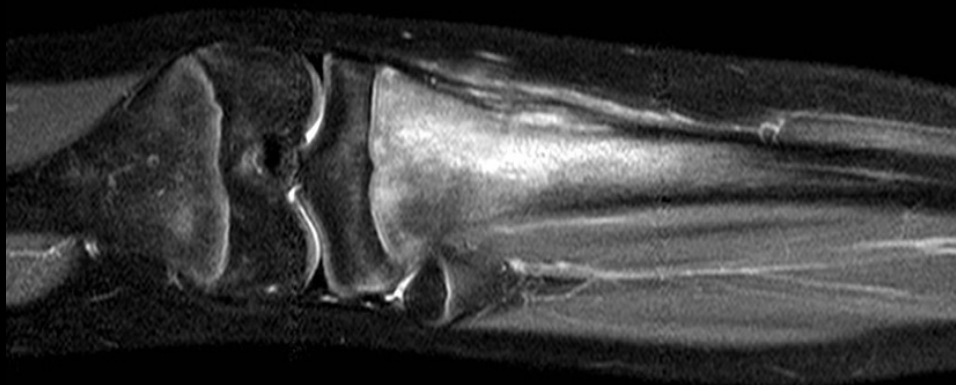
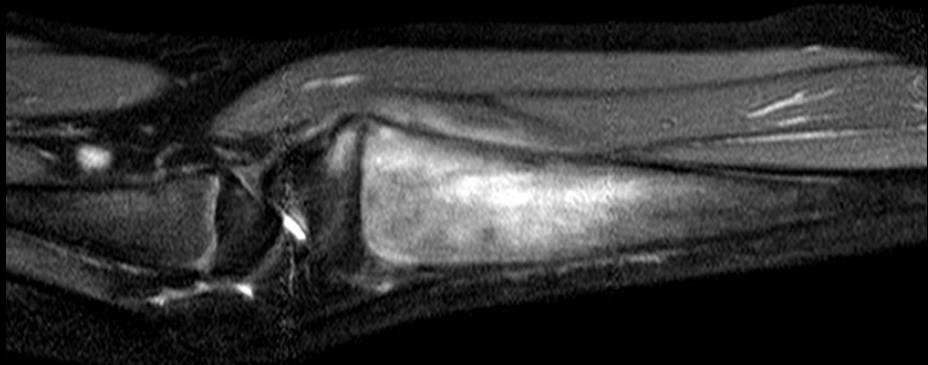
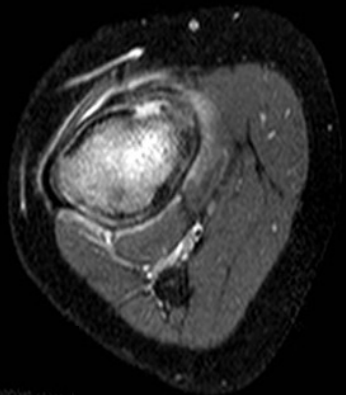


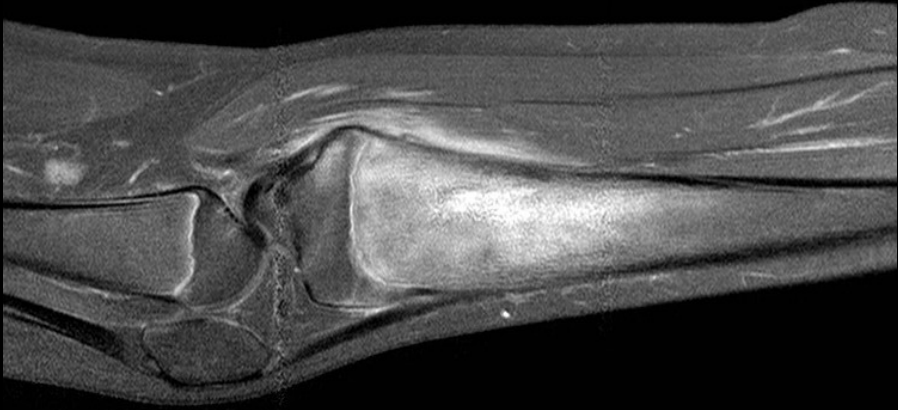
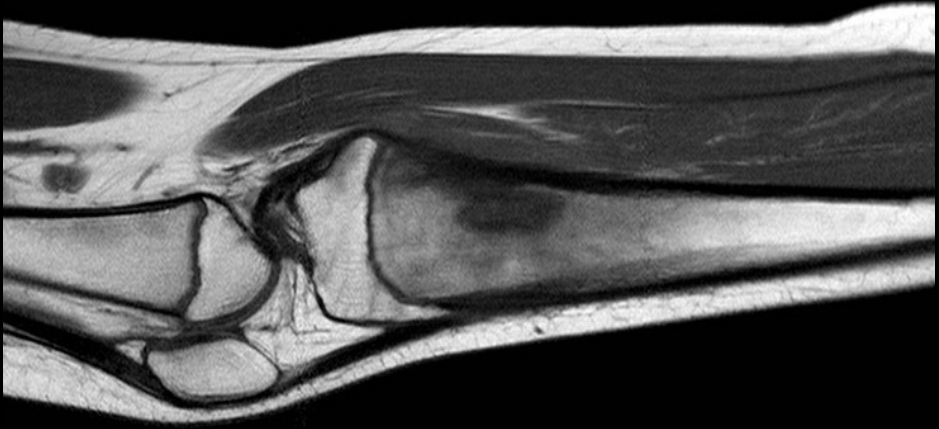
akutní lymfoblastická leukémie
„insufficiency fracture“ hoch, věk:5 roků

Diferenciální diagnostika



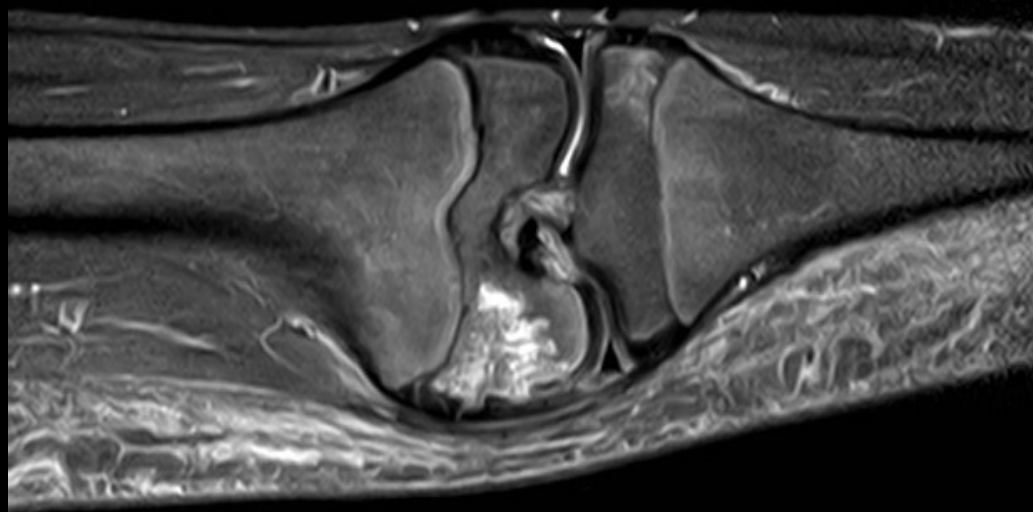
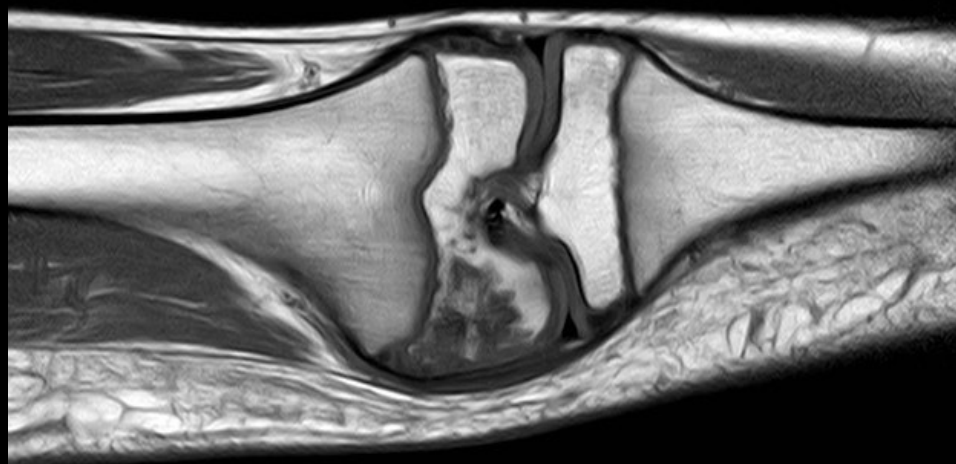
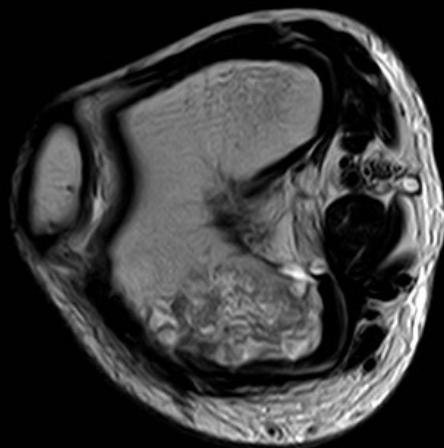
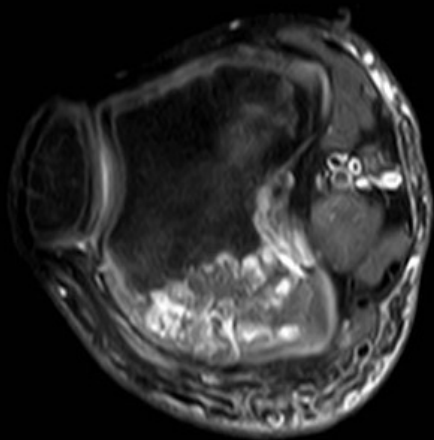
Chronická osteomyelitída, dívka, věk: 11 roků







Hemangiom mediálního kondylu femoru hoch, věk:12 roků





KONEC!