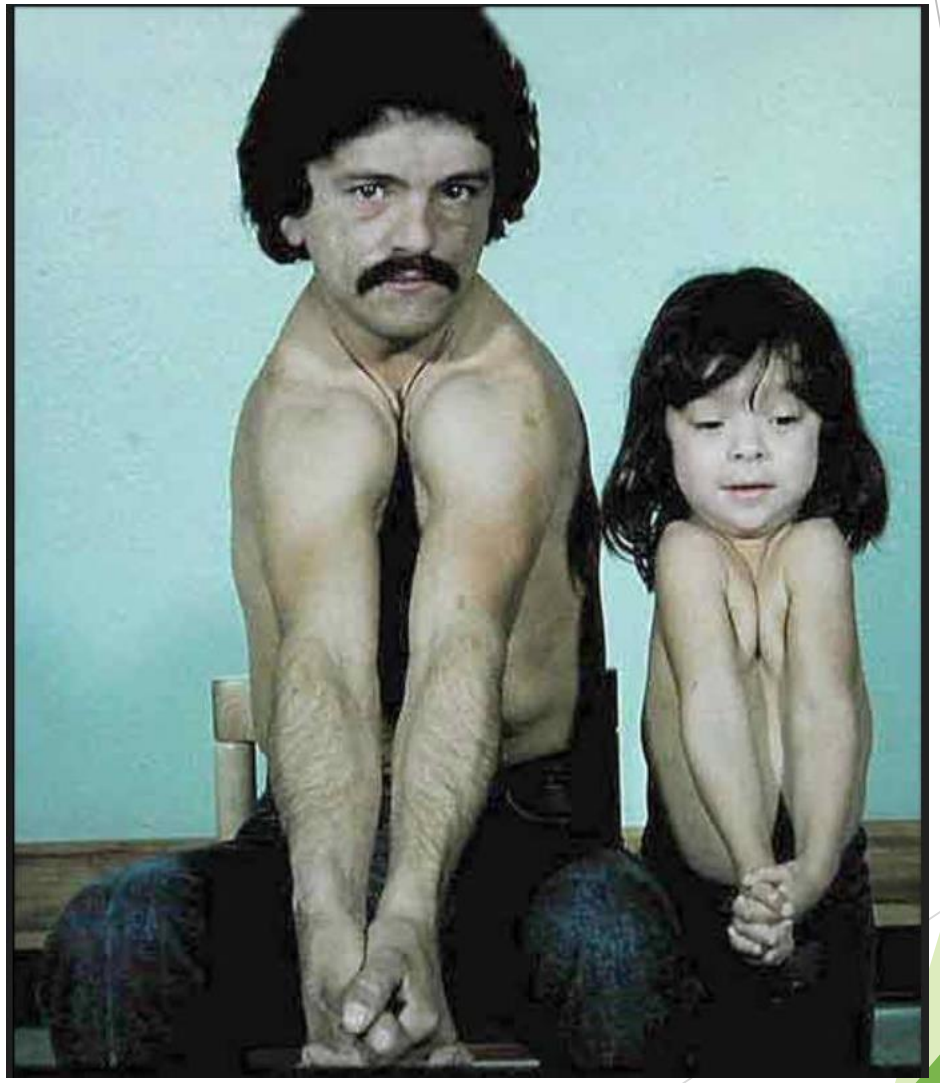
1. A 9 – year old child with high arched palate has shoulders meeting in front of his chest. He has?
    a. Erb's palsy
    b. Cleidocranial dysostosis
    c. Chondro – Osteodystrolphy
    d. Cortical hyperostosis



- Orthopaedic manifestations
- proportionate dwarfism
- clavicle dysplasia/aplasia
- wormian bones
- frontal bossing
- delayed fontanelle ossification
- due to delay in closure of skull sutures
- coxa vara
- shortened middle phalanges of 3-5 fingers
- delayed ossification of pubis
- dental abnormalities
- delayed eruption of permanent teeth

2. A short statured patient brought to Orthopaedics OPD with a X ray showing flattened vertebra with break. The probable diagnosis is ?

a. Achondroplasia

b. Ochronosis

c. Eoshinophilic granuloma

d. Calve’s disease

3. A Female with chromosomal defect, cubitus valgus, and short neck, is most likely to have?

a. **Turner's syndrome**
b. Klinefelter's syndrome
c. Marfan' syndrome
d. Sturge Weber's syndrome

Orthopaedic Manifestations in Turner Syndrome

Acosta, Anna M. MD; Steinman, Suzanne E. MD; White, Klane K. MD, MSc **Author Information**

Journal of the American Academy of Orthopaedic Surgeons: December 1, 2019 - Volume 27 - Issue 23 - p e1021-e1028
doi: 10.5435/JAAOS-D-17-00796

SDC

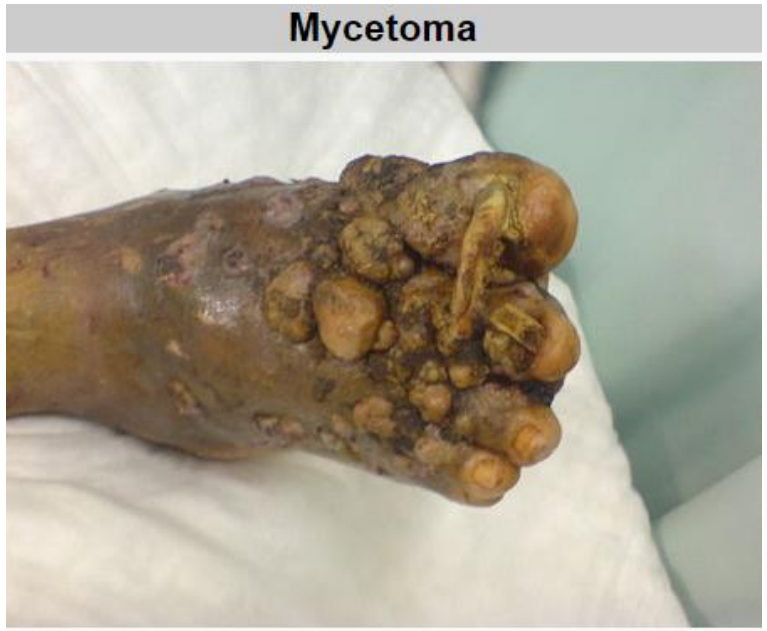
Metrics

Abstract

Turner syndrome is one of the most common chromosomal anomalies occurring in live-born females. It has been extensively reviewed in the medical literature, yet little has been discussed regarding the skeletal manifestations that present to the orthopaedic surgeon. It is important for the orthopaedic surgeon to be familiar with the clinical findings and comorbid conditions in Turner syndrome because they may be the first line of diagnosis when a patient presents for short stature, scoliosis, or slipped capital femoral epiphysis. Recent studies have identified the short stature homeobox gene as the main cause of the skeletal differences in patients with Turner syndrome, affecting longitudinal bone growth. Skeletal deformities including short stature, delayed skeletal maturation, angular deformity of the limbs, spinal deformity, and early-onset osteoporosis have been associated with Turner syndrome. This article will

4. A patient with swelling foot, push discharge multiple sinuses. KOH smear shares filamentous structures. Diagnosis is?

a. Osteomyelitis
b. Madura mycosis
c. Anthrax
d. Tetanus unilateral



Madura Foot

5. A five year old child Is suffering from painful restriction of all movements of hip joint, the most likely cause in our country is ?

a. Congenital coax vara
b. **Tuberculosis arthritis**
c. Perthes' disease
d. Sequelae of septic arthritis of infancy
e. Psoas abscess

6. The most appropriate for a 20 year old man suffering from old tuberculosis arthritis of knee with triple deformity is ?

a. Plaster immobilization
b. Joint clereance and traction
c. Total knee replacement
d. Charnley's arthrodesis

7. A bald child with swollen abdomen, hyperosteous bones with mental retardation has ?

a. Hypervitaminosis A
b. Hypervitaminosis D
c. Down’s syndrome
d. Tuberous scloresis

8. A young patient presents with enlargement of costochondral junction and with the white line of fraenkel at the metaphysis. The diagnosis is ?

a. Scurvy

b. Rickets

c. Hyperparathyroidism

d. Osteo malacia

9. A 65 year – old female patient presents with osteoporosis. The treatment started with ?

a. **Carcium + Oestrogen + Prosgesterone**
b. Oestrogen + Progesterone
c. **Calcium + Oestrogen**
d. Calcium

10. A 67 year old man on biochemical analysis found to have three fold rise of level of serum alkaline phosphatase that of upper limit of norm value during a routine checkup. but seruni calcium and phosphorous concentration and liver function test results and normal. He is asymptomatic. The probable cause is

a. Multiple myeloma
b. Paget's disease of bone
c. Primary hyperparathyroidism
d. Osteomalacia

11. A scooter is hit from behind. The rider is thrown off and he lands with his head hitting the kerb. He does not move, complains of severe pain in the neck and is unable to turn his head. Well-meaning onlookers rush up to him and try to make him sit up. What would be the best course of action in this situation?

a. He should be propped up and given some water to drink
b. He should not be propped up but turned on his face and rushed to the hospital
c. He should be turned on his back and a support should be placed behind
d. He should not be moved at all but carried to the nearest hospital in the same position in which he has been since his fall.

12. A patient presents with bone pains and on investigating calcium and phosphorus levels in serum were found to be normal except with elevation of serum alkaline- phosphatase. The probable diagnosis is

a. Osteomalacia
b. Paget's disease
c. Osteoporosis
d. Hyperparathyroidism

osteomalacia	osteoporosis
unwell	well
Generalized chronic ache	Pain only after fracture
Muscle weak	Muscle normal
Loosers zone	No Loosers zone
Alkaline phosphatase increased	Normal
Serum phosphorus decreased	Normal
Ca X P < 2.4mmol/l	>2.4 mmol/l

13. Multiple osteolytic lesions in a 2 year old child in skull and long bones are due to

a. **Neuroblastoma**
b. Histiocytosis – X
c. Wilm's tumour
d. Multiple Myeloma
e. Thalassemia majorDf

Neuroblastoma

- calcification very common: 90%
- encases vascular structures but does not invade them
- younger age group (<2 years of age)
- poorly marginated
- elevates the aorta away from the vertebral column
- more commonly crosses the midline, especially behind the aorta [2]
- more common to have extension into the chest
- bone metastases are common (Hutchinson syndrome)
- extension into spinal canal can be seen
- retroperitoneal lymph nodes are more often seen

Wilms tumor

- calcification uncommon: 10-15% (10% rule of Wilm's tumor)
- displaces adjacent structures without insinuating between them, also with displacement of the renal vessels
- slightly older age group: peak 3-4 years of age
- well-circumscribed
- claw sign with the kidney
- extension into IVC/renal vein
- bone metastases are rare, rather lung metastases are common
- extension into spinal canal never seen
- retroperitoneal lymphadenopathy is uncommon
- higher incidence of hemorrhage

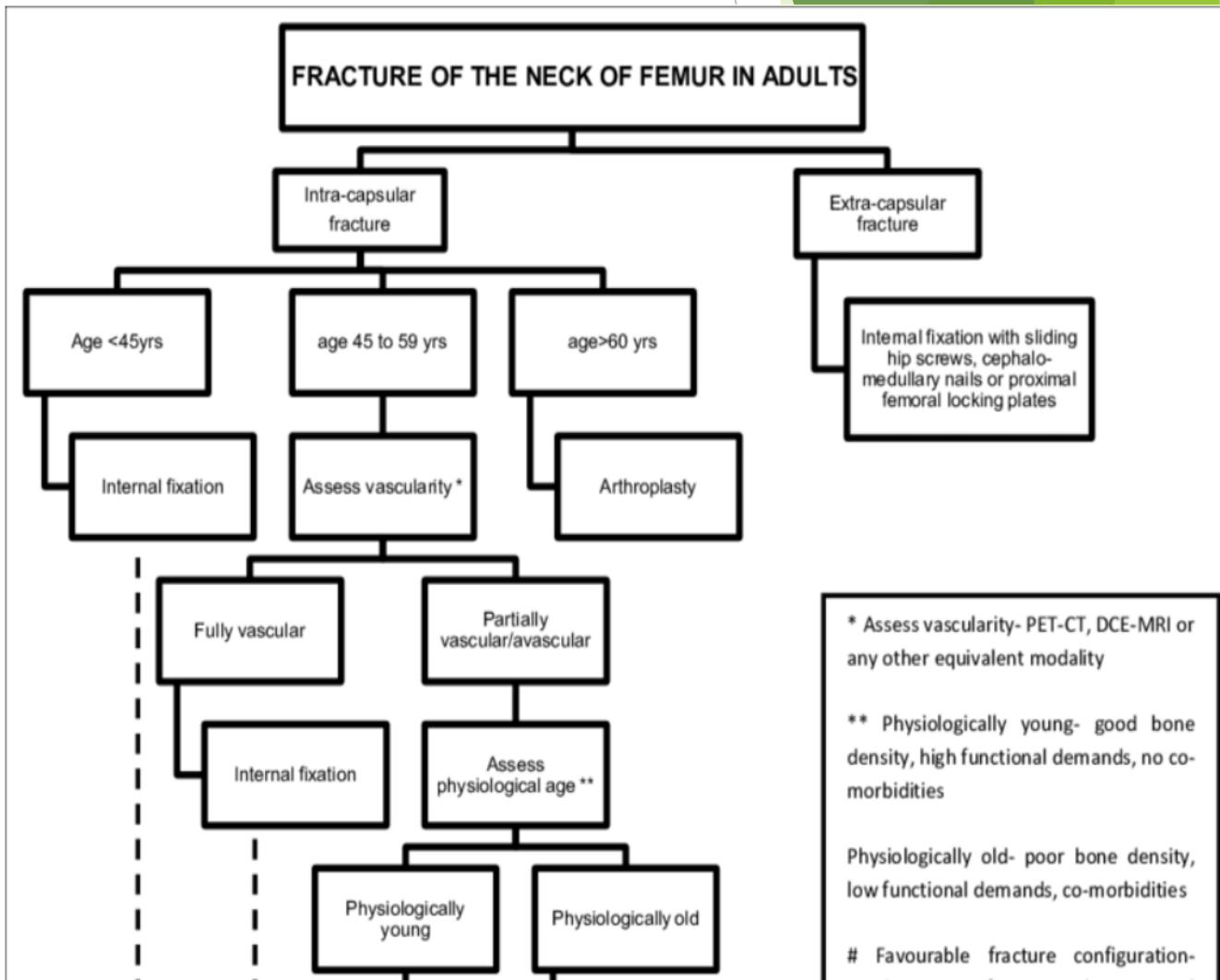
14. In Fracture neck of femur in old persons is best treated by

a.Replacement arthroplasty

b.Thomas's splint support

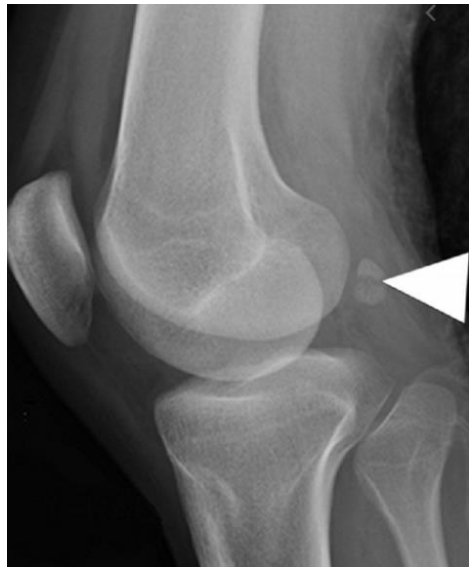
c.No treatment

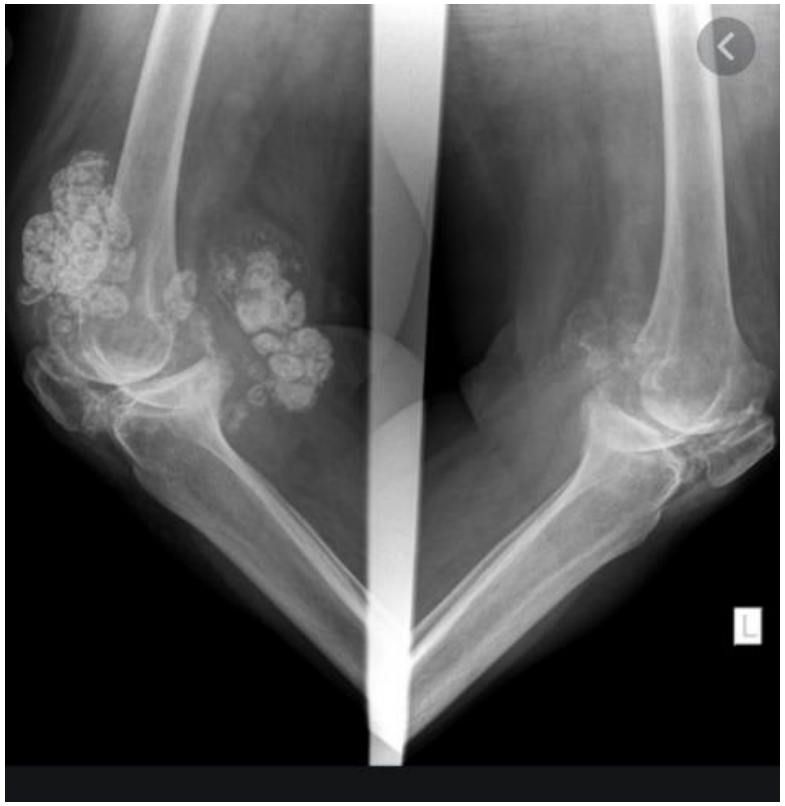
d.Internal fixation with SP nailFdsf



15. One of the following is to be considered as differential diagnosis for foreign body in plain X-ray of knee joint:

a. Fabella
b. Calcified bursa
c. Patella
d. Chondromatosis





16. Pain in small joints in an elderly lady is most likely due to
    a. Rheumatic arthritis
    b. Rheumatoid arthritis
    c. Psoriatic arthritis
    d. Reiter's disease

17. A 35-Year-old businessmen presents suddenly with severe pain, swelling and redness in left big toe in early morning. Most likely diagnosis is

a. Rheumatoid arthritis

b. Gouty arthritis

c. Pseudogout

d. Septic arthritis

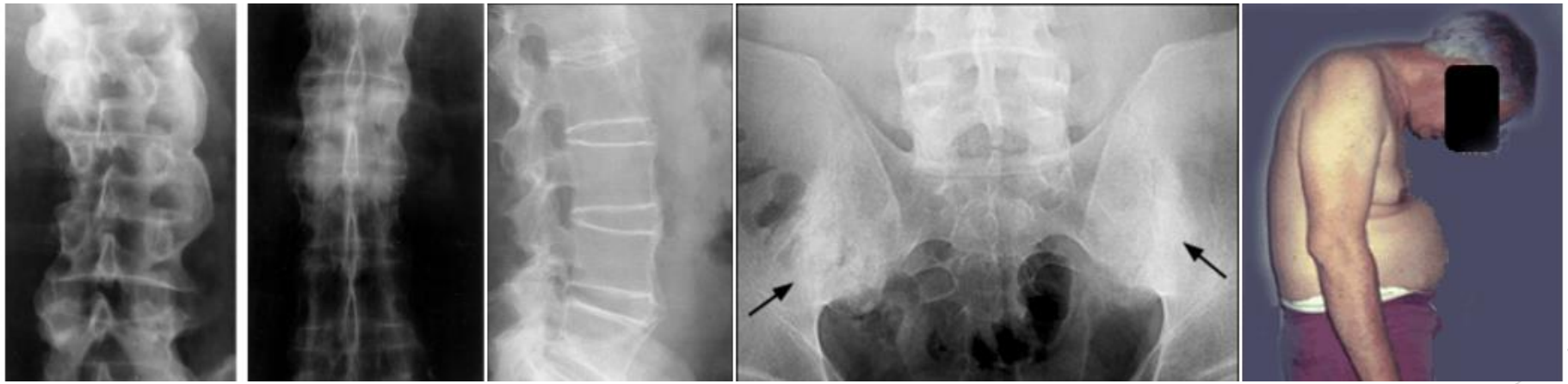
18. A young male presents with joint pains and backache. X-ray of spine shows evidence of sacroilitis. The most likely diagnosis is

a. Rheumatoid arthritis

b. Ankylosing spondylitis

c. Polyarticular juvenile arthritis

d. Psoriatic arthropathySdfsd



18. A woman presented with right shoulder pin and Rheumatoid factor test came as negative, but the pain responded to the Prednisolone therapy. The diagnosis includes

a. Osteopetrosis

b. Seronegative Rheumatoid arthritis

c. Polymyalgia

d. Polymyalgia rheumtica

Pharmacologic Management of RA	
1st Line: Low dose steroids	
Corticosteroids	
2nd Line: Disease modifying anti-rheumatic drugs (DMARDs)	

20. A 5-year-old girl presents with pain in the right hip, and limp. What is the probable diagnosis?

a. Slipped capital femoral epiphysis
b. Tuberculosis of hip
c. Perthes' disease
d. CDH

21. A Patient is using oral steroids for a period of 5 years and patient complaints of pain in the both hip regions. Which one of the following is a diagnostic modality for confirmation of diagnosis?

a. Plain X ray.
b. CT scan.
c. MRI.
d. Isotope Bone scan.

Nuclear medicine imaging in osteonecrosis of hip: Old and current concepts

Kanhaiyalal Agrawal, Sujit Kumar Tripathy, Ramesh Kumar Sen, S Santhosh, and Anish Bhattacharya

▸ Author information ▸ Article notes ▸ Copyright and License information Disclaimer

Abstract

Go to:

Osteonecrosis (ON) is caused by inadequate blood supply leading to bone death, which results in the collapse of the architectural bony structure. Femoral head is the most common site involved in ON. Magnetic resonance imaging (MRI) is a commonly used imaging modality to detect early ON. When MRI is inconclusive, bone scan is helpful in detecting ON during early phase of the disease. As newer nuclear medicine equipment, like single photon emission computed tomography/computed tomography (CT) and positron emission tomography/CT, are emerging in medical science, we review the role of these imaging modalities in ON of femoral head.

22. A boy presenting with swelling at lower end femur with calcified, nodular shadow in lung has :

a. Osteosarcoma.

b. Osteochondroma

c. Tuberculosis femur lower end.

d. Osteomyelitis.

23. In an 8-year-old child the least common cause of lytic bone lesion in proximal femur.

a. **Plasmacytoma.**
b. Histiocytoma.
c. Metastasis.
d. Brown tumour.

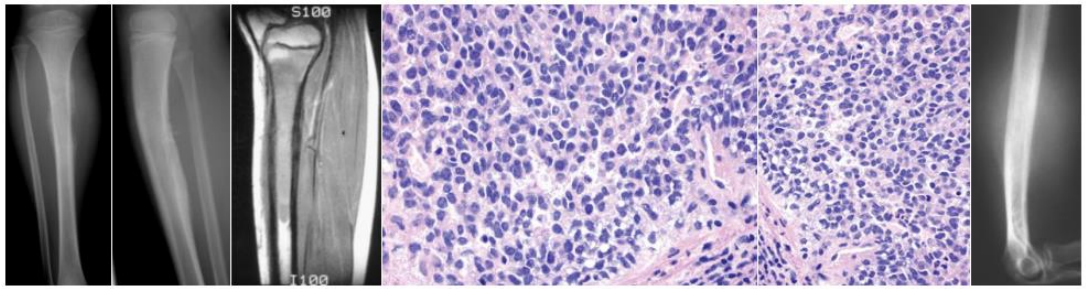
24. A 8 year old child has a swelling in diaphysis of femur. Histology reveals, small clear round symmetrical cells, minimum cytoplasm, necrotic areas, and minimum osteoid and chondroid material cells. Most likely, it contains :

a. Mucin.

b. Lipid.

c. Iron

d. Glycogen



Introduction

- A distinctive small round cell sarcoma
- Epidemiology
  - demographics
    - typically found in patients from 5-25 years of age
    - second most common malignant bone tumor in children
    - uncommon in African Americans and Chinese
  - locations
    - ~50% are found in the diaphysis of long bones
      - most common locations pelvis, distal femur, proximal tibia, femoral diaphysis, and proximal humerus
    - 5% metaphysis
- Genetics
  - t(11:22) translocation
    - found in 95% of cases
    - leads to the formation of a fusion protein (EWS-FLI1)
      - can be identified with PCR and useful to differentiate Ewing sarcoma from other round cell lesions

- Gross appearance
  - may have liquid consistency mimicking pus
- Characteristic findings
  - sheets of monotonous small round blue cells
  - prominent nuclei and minimal cytoplasm
  - may have pseudo-rosettes (circle of cells with necrosis in center)
- Immunostaining
  - positive
    - CD99 (in 95%)
    - MIC2
    - vimentin
    - PAS positive (intracellular glycogen)
    - neuron specific enolase (NSE)
    - S100
    - Leu7
  - negative
    - cytokeratin
    - reticulin (positive in lymphoma)
    - neurofilament (positive in neuroblastoma)

25. Kachrumal, a 46 year old man has expansive growth metaphysis with endosteal scalloping & dense punctate calcification. Most likely bone tumour is

a. Osteosarcoma
b. Chondrasarcoma
c. Osteoclastoma
d. Osteoid osteoma

findings

- lytic or blastic lesion with reactive thickening of the cortex
- 85% of patients have significant cortical changes
  - low-grade chondrosarcomas show
    - similar appearance to enchondromas with additional cortical thickening/expansion and endosteal erosion
  - high-grade chondrosarcomas show
    - cortical destruction and a soft tissue mass
- intra-lesional "popcorn" mineralization may be seen
  - described as rings, arcs, and stipples of mineralization, more prevalent as lesions age
- de-differentiated chondrosarcomas radiographically show a lower grade chondroid lesion with superimposed highly destructive area consistent with the high grade transformed dedifferentiated chondrosarcoma
- mesenchymal chondrosarcomas appear similar to Ewing sarcoma with permeative bone destruction and periosteal reaction