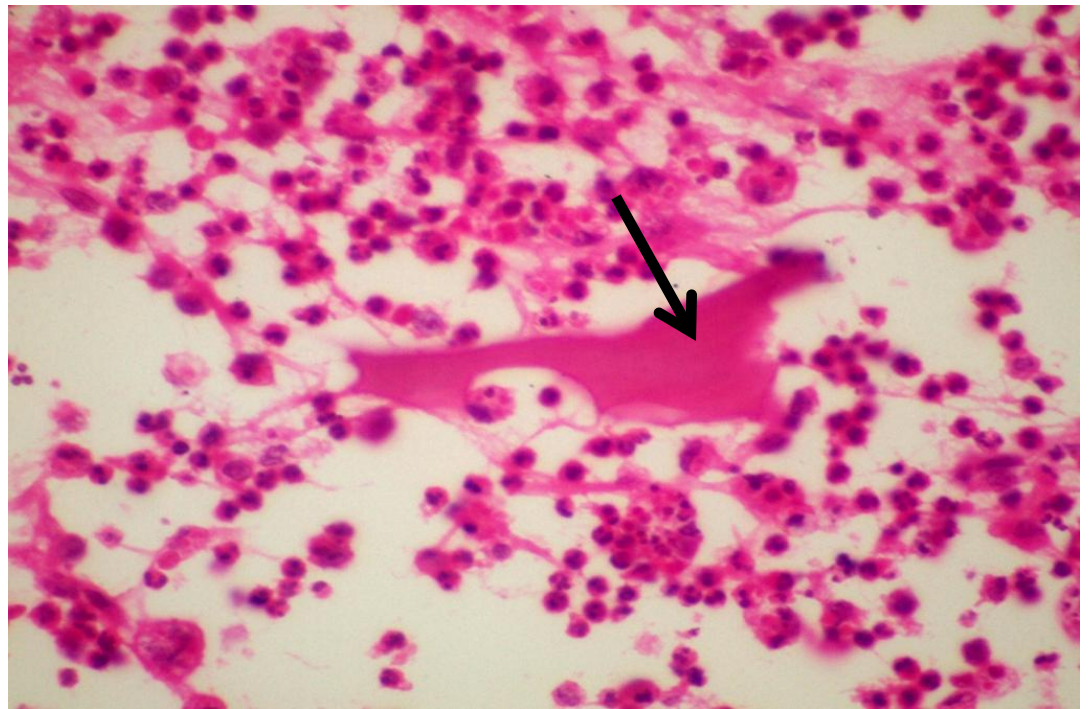
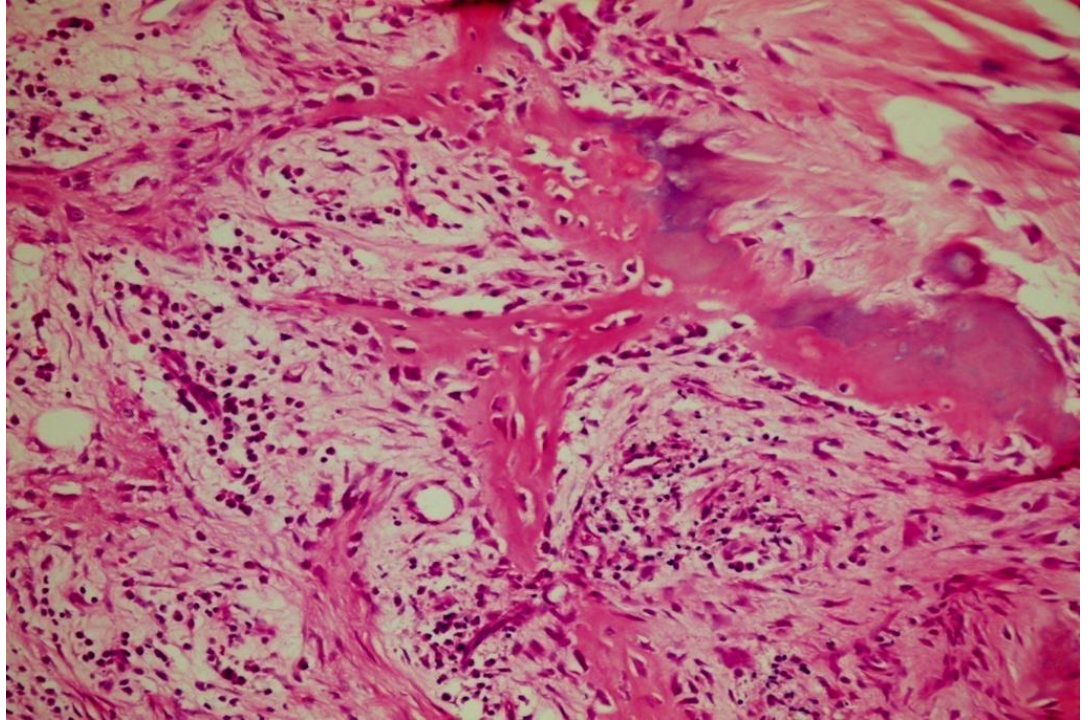


MSK system- 2nd yr medical
students

Lab #1

Slide BB 179 : Osteomyelitis

- Describe the microscopic findings in this picture.
- What is the most common offending microorganism ?
- What does the black arrow represent?
- Name 3 complications of chronic osteomyelitis.

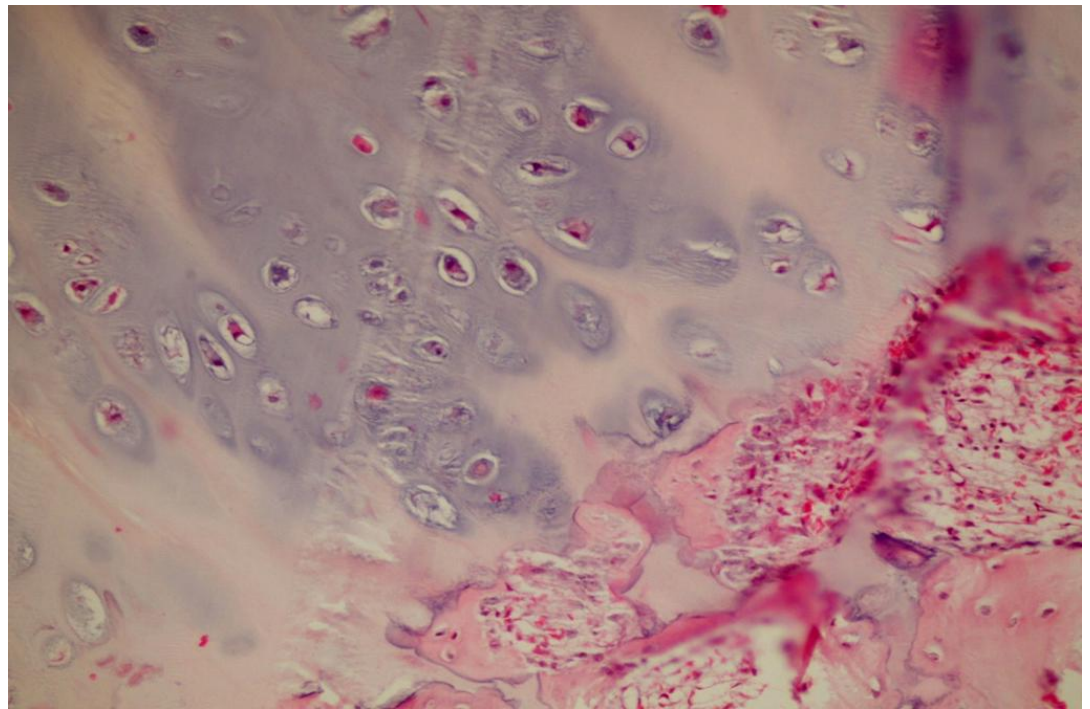
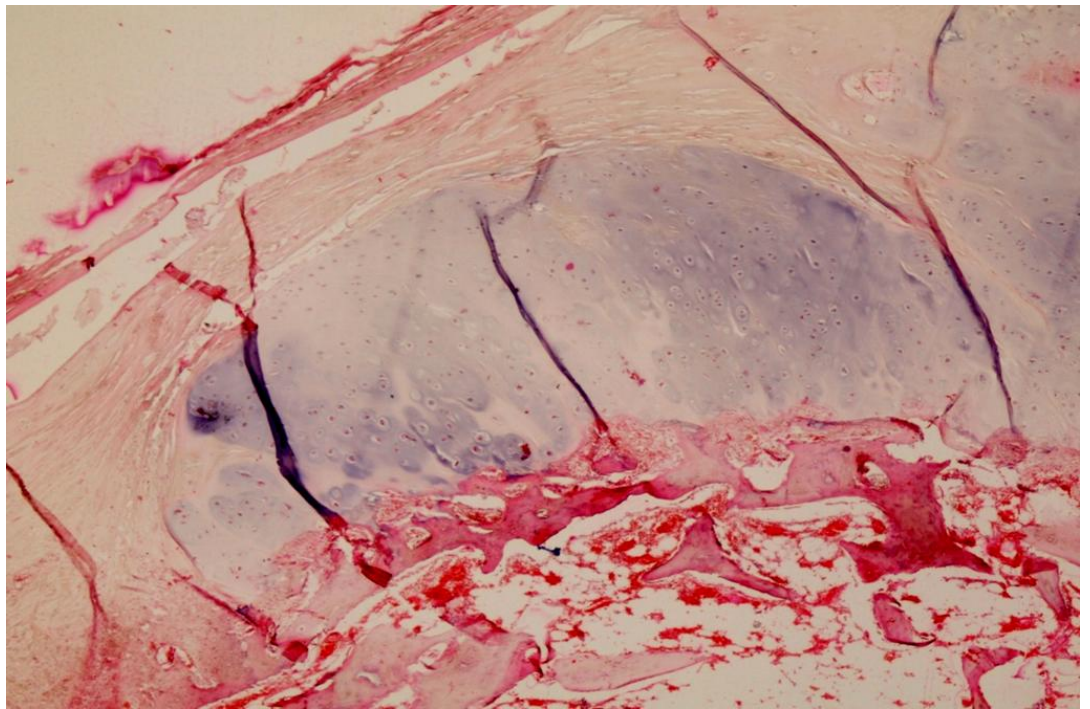


Slide L131: Osteochondroma

•Describe the histologic components of this lesion. Which one is truly neoplastic?

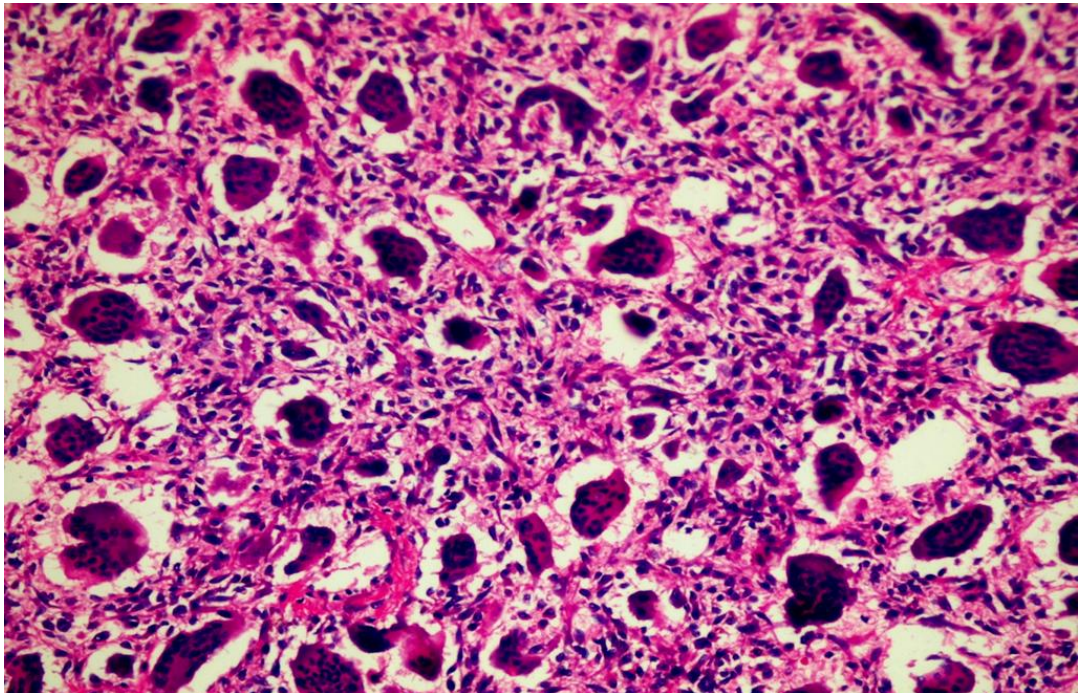
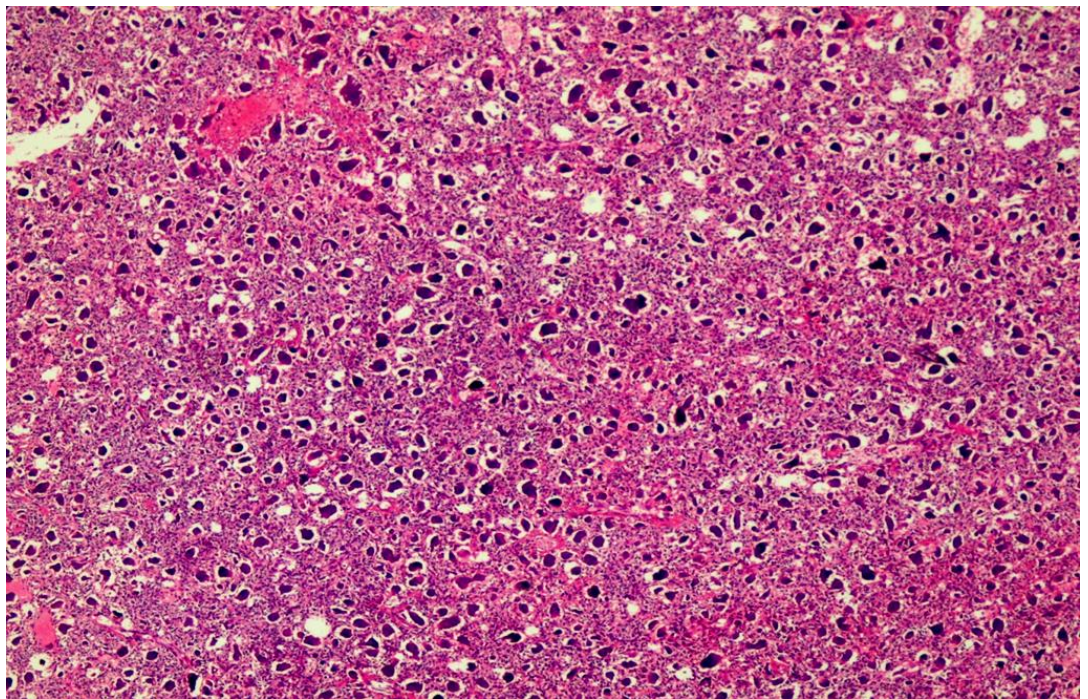
•Is it a malignant tumor?

•Name a genetic abnormality associated with this lesion?



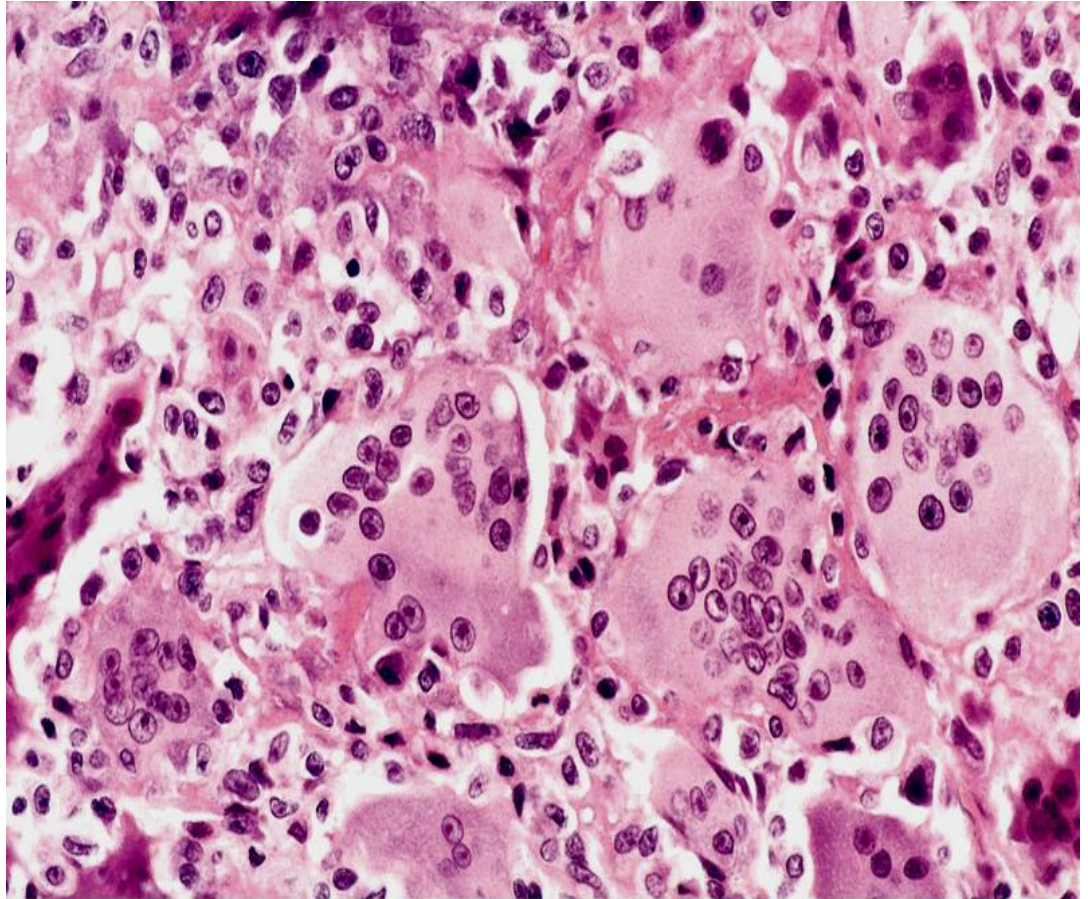
Slide L208: Giant cell tumor

- a common benign but locally aggressive bone tumor, belongs to the “Miscellaneous Bone Tumors “
- arise in the epiphysis and involve the metaphysis of long bones around the knee (distal femur & proximal tibia)
- usually arise in 20s to 40s.
- Prominent non-neoplastic multinucleate osteoclast-type giant cells.



Slide L208: Giant cell tumor

- Despite the name, molecular analyses have shown that it is the mononuclear cells in the tumor that are neoplastic.
- Mononuclear cells express RANK ligand → stimulate the development of surrounding non-neoplastic osteoclast-like cells.
- Although considered benign, (1/2 of cases) recur after surgery

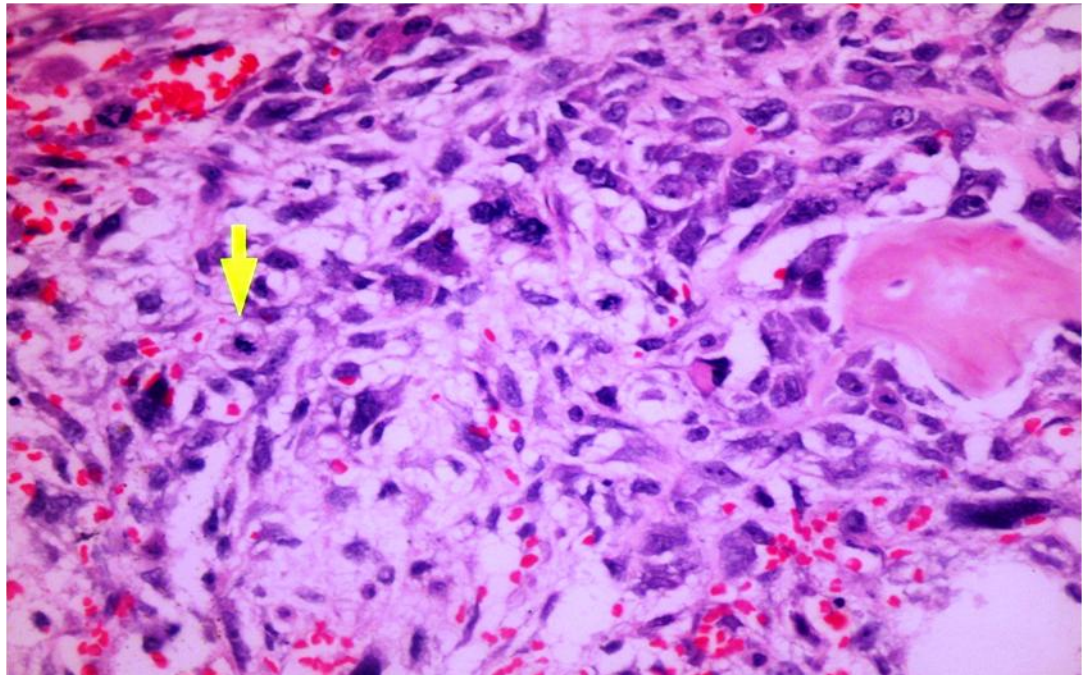
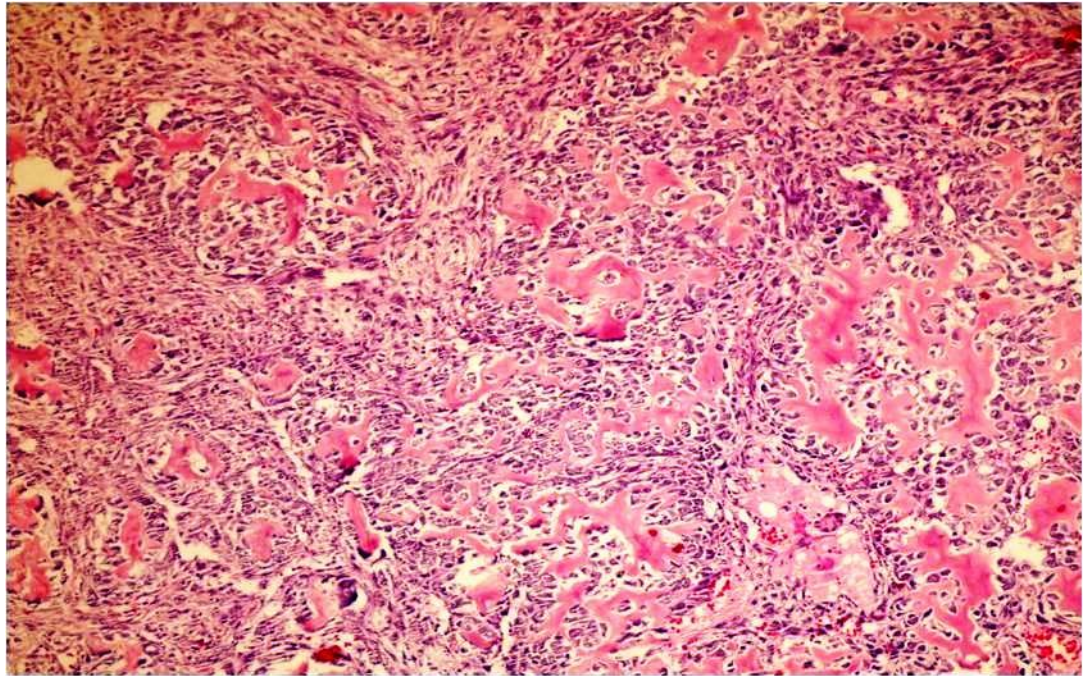


Kumar et al: Robbins Basic Pathology, 9e.
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Slide L 213:

Osteosarcoma

- This is a microscopic picture of a femur tumor in a 21 year old male. What is your diagnosis?
- What is the diagnostic histopathologic finding?
- Describe the anaplastic features you see in the cells.
- Name 2 genetic syndromes associated with this lesion.



Please make sure to study the following jars from the pathology lab:

- 8/14➡ chondrosarcoma
- 2/14➡ osteosarcoma (Codman's triangle)
- 5/15➡ sequestra (osteomyelitis)