

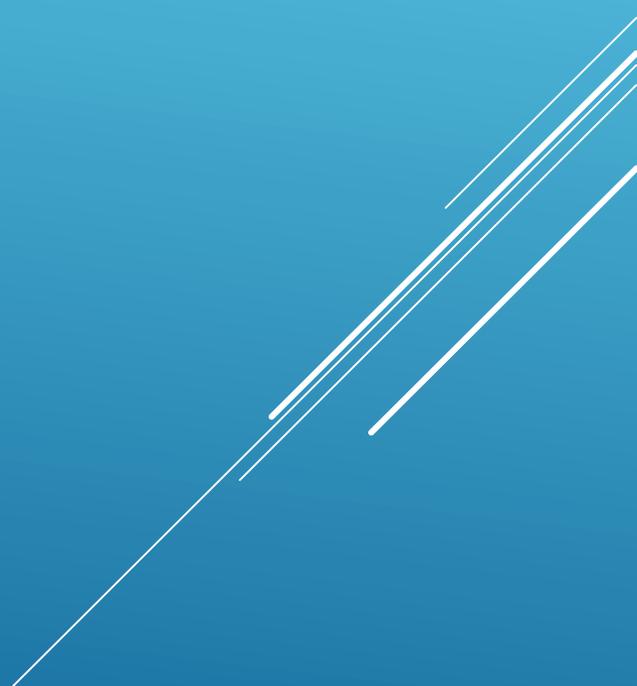
IMAGE MODALITIES IN Bone Tumors

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Associated Professor

GENERAL CONSIDERATION

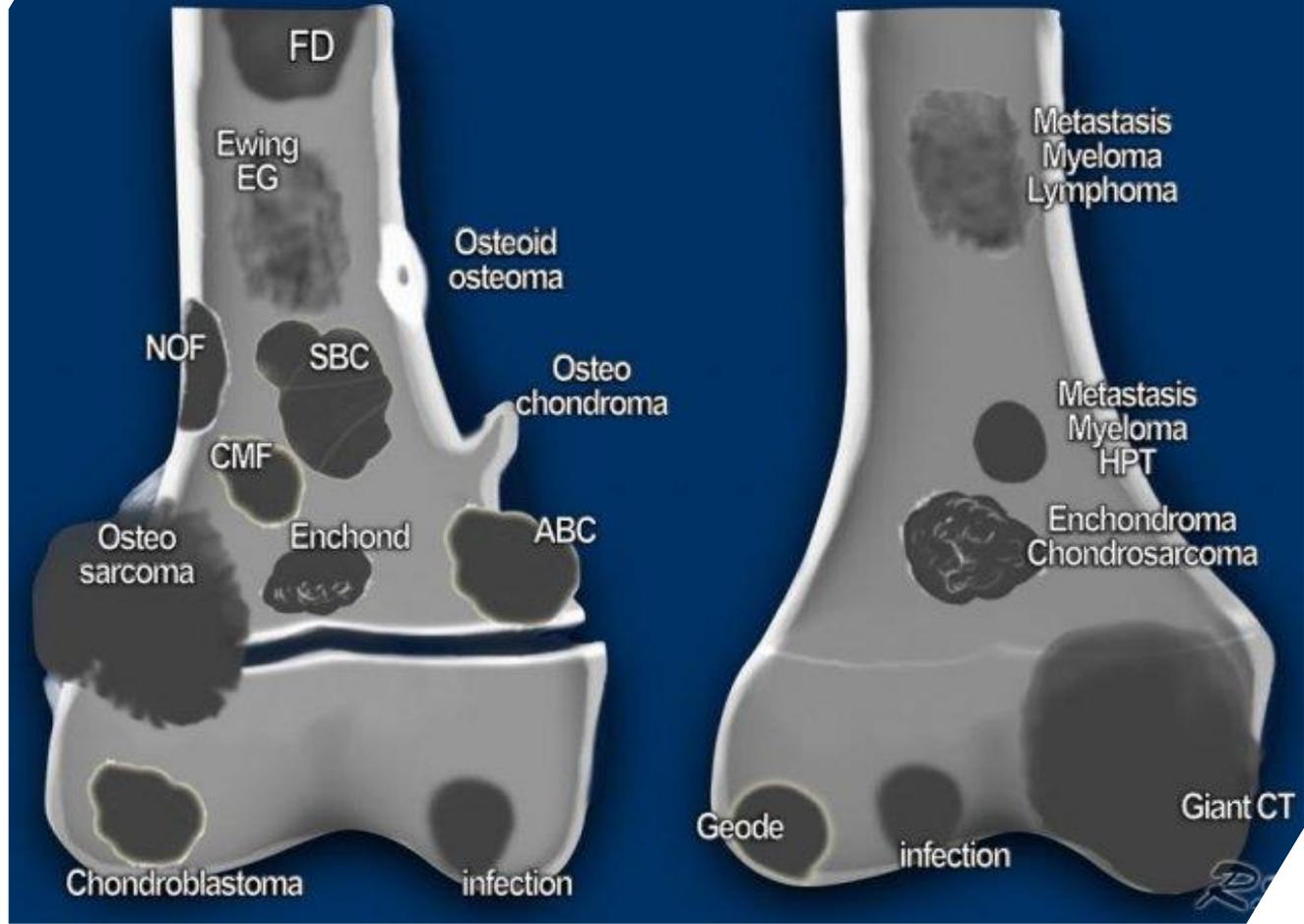
1. AGE
 2. GENDER
 3. TUMOR LOCATION
 4. RADIOGRAPHY
- 
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RADIOGRAPHIC DIFFERENTIATION OF MALIGNANT VS BENIGN TUMORS

- * TRANSITIONAL ZONE
 - * TYPE OF PERIOSTEAL REACTION
 - * CORTICAL DISRUPTION
 - * SOFT TISSUE COMPONENT
- 
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< 30 years

> 30 years



AGE:

* ACUTE LEUKEMIA	0 – 1 YO
* METASTATIC NB	1 – 5 YO
* EWING SARCOMA	5 – 15 YO
* OSTEOGENIC SARCOMA	15 – 25 YO
* LYMPHOMA	25 – 40 YO
* METASTASIS & MM	40 – 60 YO
* CHONDRO & FIBROSARCOMAS	60 – 80 YO

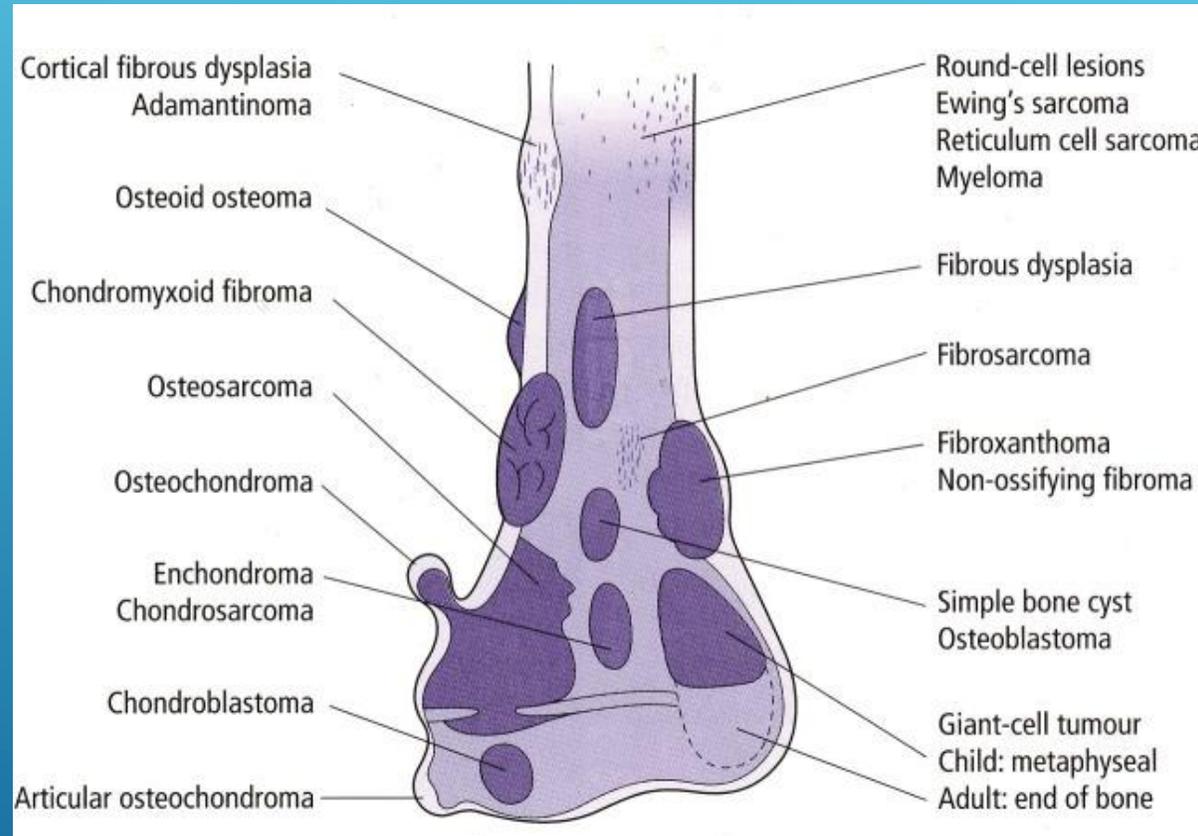
SYMPTOMS:

- * BONE PAIN
 - * SWELLING AND TENDERNESS NEAR THE AFFECTED AREA
 - * WEAKENED BONE, LEADING TO FRACTURE
 - * FATIGUE
 - * UNINTENDED WEIGHT LOSS
- 

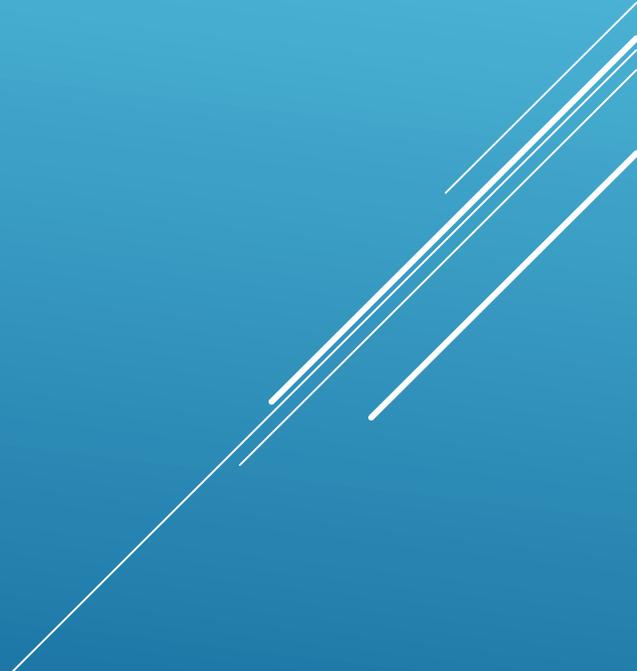
INTERPRETATION OF RADIOGRAPHS:

- * WHERE IS THE LESION? IN WHICH BONE AND WITHIN WHICH ANATOMICAL REGION OF THAT BONE?
 - * WHAT IS IT DOING TO THE BONE?
 - * HOW IS THE BONE RESPONDING?
 - * WHAT IS IN THE LESION?
- 
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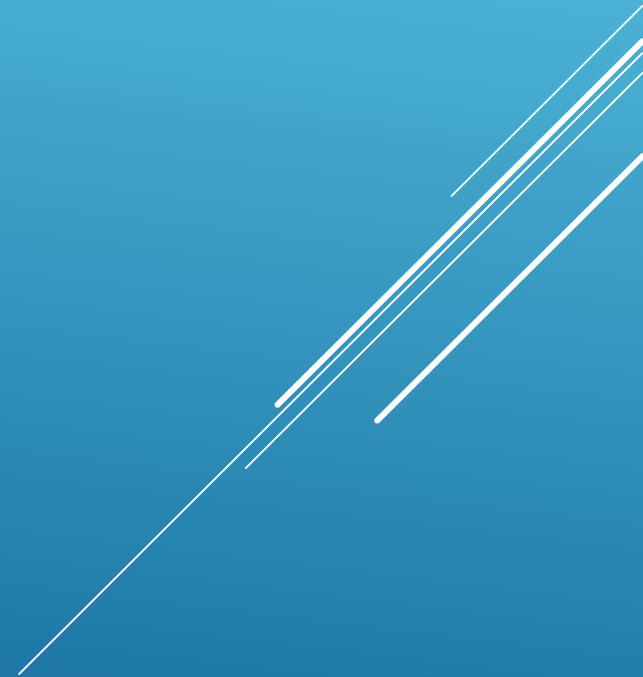
WHERE IS THE LESION?



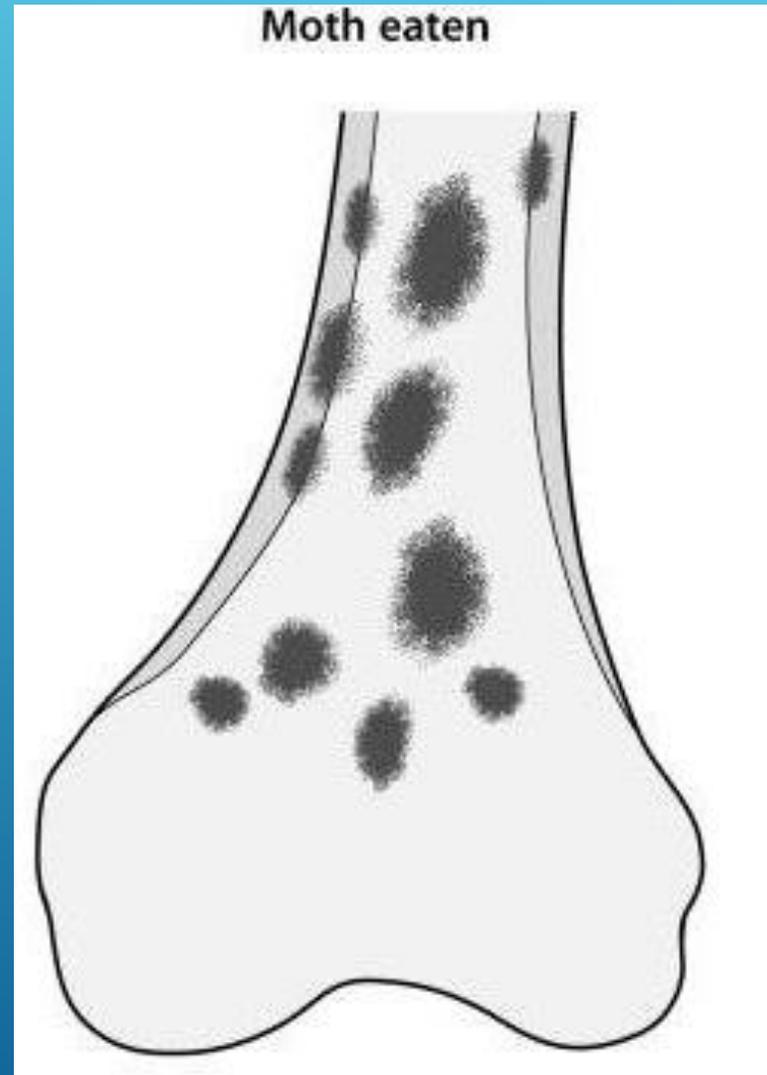
WHAT IS IT DOING TO THE BONE?

- * OSTEOLYSIS
 - * OSTEOLASTIC REACTION
 - * MIXED
- 
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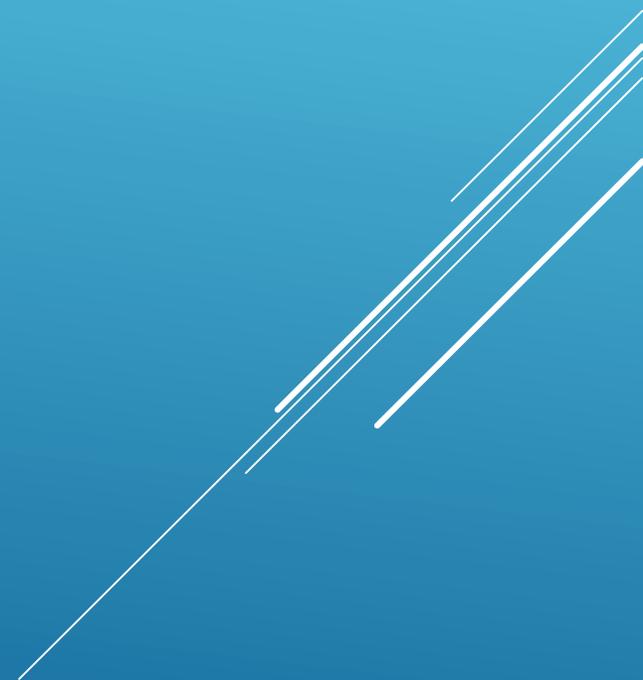
GEOGRAPHIC BONE DESTRUCTION



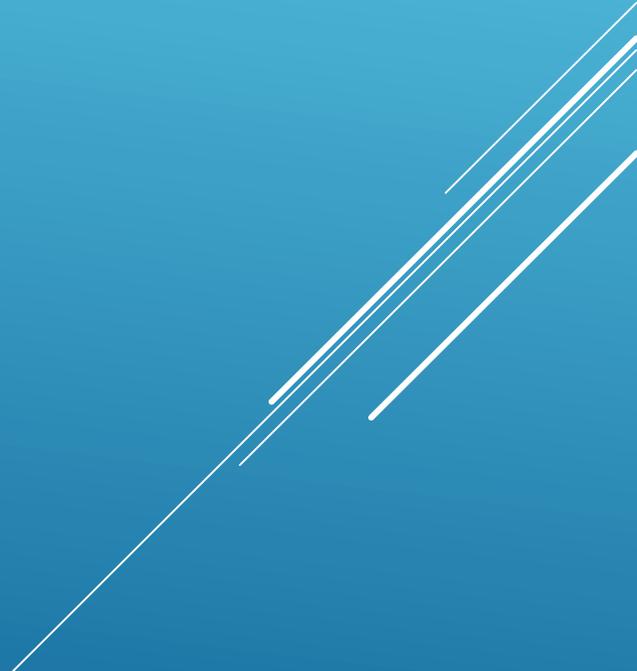
MOTH-EATEN APPEARANCE



PERMEATIVE APPEARANCE



WHAT IS THE BONE DOING?

- * NO RESPONSE
 - * PERIOSTEAL REACTION
 - * ONION SKIN
 - * CODMAN TRIANGLES
 - * SUN BURST OR HAIR-ON-END
- 
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WHAT IS IN THE LESION?

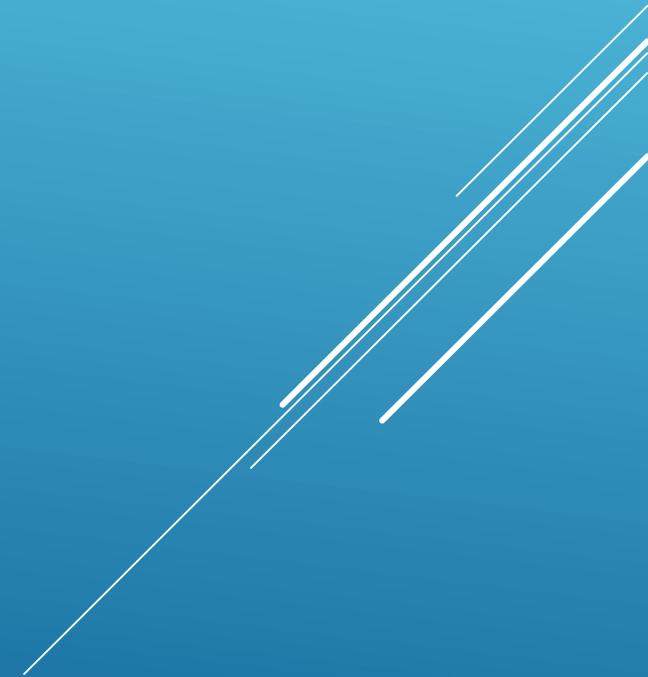
- * OSSEOUS MATRIX
- * CHONDROID MATRIX



MALIGNANT BONE TUMORS

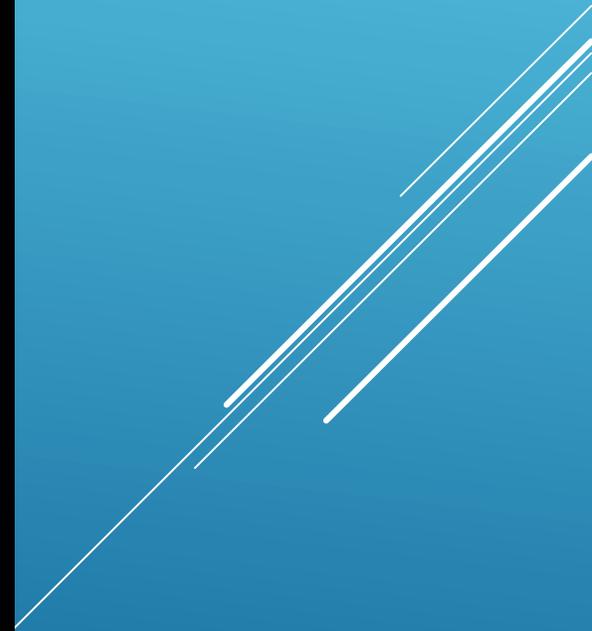
- * ACUTE LEUKEMIA
 - * METASTATIC NB
 - * EWING SARCOMA
 - * OSTEOGENIC SARCOMA
 - * LYMPHOMA
 - * METASTASIS & MM
 - * CHONDRO & FIBROSARCOMAS
- 
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ACUTE LEUKEMIA



METASTATIC NB

R



EWING SARCOMA

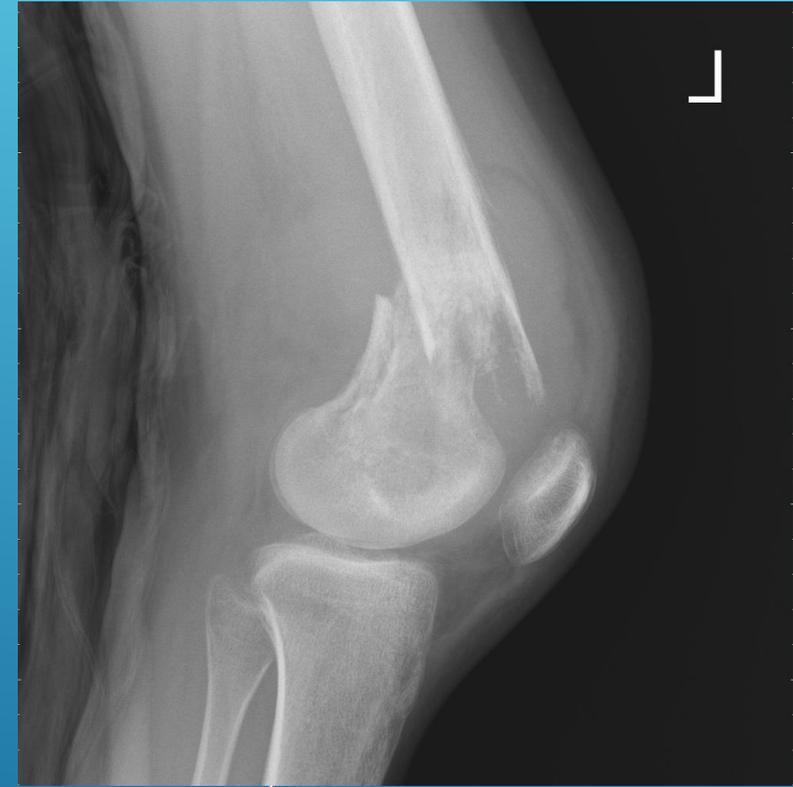


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OSTEOGENIC SARCOMA



OSTEOGENIC SARCOMA



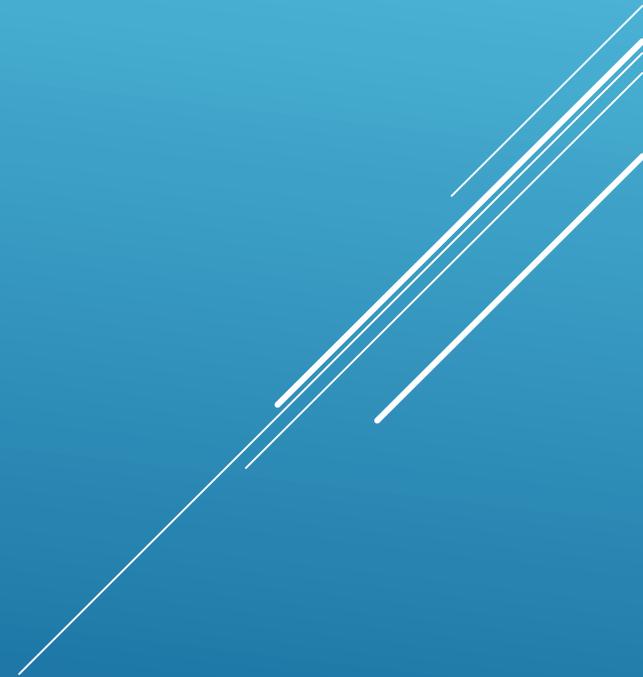
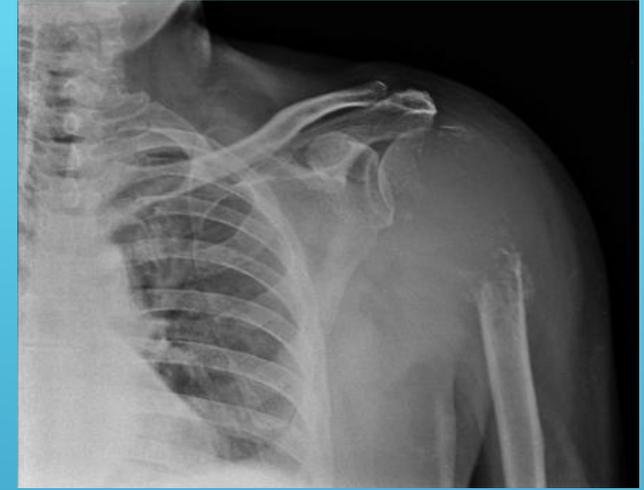
LYMPHOMA



METASTASIS & MM



METASTASIS & MM



CHONDRO & FIBROSARCOMAS



THE END