Bone Neoplasm

- Benign – Malignant differentiation
  - Location
  - Margins of lesion
    - Sharp = narrow zone of transition = not aggressive
    - Fuzzy = wide zone of transition = aggressive
  - Matrix – appearance of contents
    - Chondroid – cartilage like
    - Osteoid – bone like
    - Mixed
Non-ossifying Fibroma

- Well defined sclerotic margin
- Internal septations

Non Ossifying Fibroma

- Sharp demarcation
- Benign appearing
**Enchondroma Phalanx**
- Sharp margins
- Typical location
- Benign process

**Osteogenic Sarcoma**
- Destructive lesion in the distal femur (arrowheads)
- Permeative – ‘broad zone of transition’
- Extends into the medial soft tissues
- Zone of periosteal reaction along proximal femur (arrows)
Parosteal Osteogenic Sarcoma

- Destructive lesion of the proximal humerus
- History of breast carcinoma

Metastatic Breast Cancer

- Destructive lesion of the proximal humerus
- History of breast carcinoma