Unicameral Bone Cyst

- Benign simple bone cyst
- Common in under 20 age group and usually asymptomatic
- Proximal humerus most common site
- 50% present due to pathological fracture

- Start in metaphysis adjacent to physis, move into diaphysis as bone grows
  - Latent – separate from physis
  - Active – in communication with physis

- X-rays show geographic lesion with cystic expansion with thinning of cortices
- **Fallen-leaf** sign is pathognomonic – pathologic fracture with cortical fragment falling into empty cyst.
- MRI – T1 dark, T2 bright, rim enhancement with Gadolinium contrast

- Treatment options:
  - Immobilisation for proximal humerus even after pathological fracture
  - 15% will fill with new bone
  - Aspiration and steroid injection for active cysts – may need repeating
  - Curettage & bone grafting
  - For latent cysts only that fail other treatments
  - Not for active cysts as will cause growth arrest
  - Also indicated for proximal femoral lesions pre-fracture
    (internal fixation once fractures to avoid malunion)

- Differential is an ABC – usually wider than physis though, whereas unicameral cyst width does not exceed physis width.