

Chondromyxoid fibroma

- Wide age range; mean: 23 years, median: 18 years
- 50% in 2nd decade at presentation
- Slight male predominance
- Rare lesion (< 1% of bone tumors)
- 2.3% of cartilage tumors (least common benign cartilage tumor)
- Excellent prognosis
- Treatment: marginal excision (curettage and bone grafting)
- Recurrence rate of 15-25%

Chondromyxoid fibroma

- Top Differential Diagnoses
- Giant cell tumor (GCT)
 - Similar location (eccentric, originates in metaphysis, extends to subarticular region)
 - GCT also geographic but rarely has sclerotic margin
- Aneurysmal bone cyst (ABC)
 - Eccentric, metadiaphyseal lesion
 - Geographic, expanded
 - Usually fluid-fluid levels seen on MR; rarely solid

Image

- Location: 61% in long bones
- ~ 50% occur around knee
- Proximal tibia is single most frequent site
- 24% in bones of hand/foot
- 25% in flat bones
- Of flat bones, iliac wing is most common
- Site of origin: metaphyseal (53%) or diaphyseal (43%)
- Geographic with sclerotic margin
- Eccentric (58%), lobulated, with thinning of cortex
- Expansile in 85% of cases, more so in small bones
- Chondroid matrix uncommon (< 10%)





[VIEW FULL SCREEN IMAGE](#)

AP radiograph in a 24-year-old man shows an expansile lesion centered in the proximal metaphysis of the fibula → with extension into diaphysis and epiphysis. Differential considerations would include aneurysmal bone cyst (ABC), germ cell tumor (GCT), and CMF. Note pseudotrabeculations, typical of CMF.

David H. Rosenthal