

Non ossifying fibroma

Definition

Also known as metaphyseal fibrous defect.

Fibrous cortical defects are the same pathological lesion but smaller in size. The arbitrary cut off is 2cm.

Non-ossifying fibromas may be seen with café-au-lait spots, and this is known as Jaffe-Campanacci syndrome

Epidemiology

Extremely common, found in around 1/3 of patients 4-8 years old.
Multiple in more than 50%.

Site

Metaphysis of long bones of lower limb, especially the distal end of the femur.

Aetiology

Muscular pull or periosteal injury may predispose.

Clinical

Usually asymptomatic, picked up on routine XR.
May sustain pathological fracture if more than 50% of the bone is involved.

Radiology

The lesions usually lie in the long axis of the bone and are eccentrically located. They often produce some bulging of the cortex and may cause thinning of the cortex.

The boundary is sclerotic and there may be trabeculae.

MRI: intermediate signal intensity T1 and T2.

Pathology

Grossly, has a yellowish appearance caused by the foam cells.

Consists of proliferation of spindle cells, in a swirling pattern. Haemosiderin is seen, as are giant cells and foam cells.

Treatment

Asymptomatic lesions do not need treatment. Large lesions with impending fracture may require curettage and bone grafting.

Prognosis

Most regress.