

## BONE TUMOURS

The term 'bone tumour' is a broad term used for benign and malignant neoplasms. Metastatic deposits in the bone are commoner than primary bone tumours. Of the primary bone malignancies, multiple myeloma is the commonest. Osteochondroma is the commonest benign tumour.

### BENIGN TUMOURS

#### Osteoma

This is a benign tumour composed of sclerotic, well-formed bone protruding from the cortical surface of a bone. The bones involved most often are the skull and facial bones. Generally, the tumour is of no clinical significance except that it may produce visible swelling. Sometimes, it may bulge into one of the air sinuses (frontal, ethmoidal or others), and cause obstruction to the sinus cavity, leading to pain.



#### Osteoid Osteoma

It is the commonest true benign tumour of the bone.

#### Clinical presentation

The tumour is seen commonly between the ages of 5-25 years. The bones of the lower extremity are more commonly affected; tibia being the commonest.

The presenting complaint is a <sup>1</sup>nagging مزعج pain, <sup>2</sup>worst at night, and is <sup>3</sup>relieved by salicylates (ex: aspirin).

#### Osteoclastoma (Giant Cell Tumour)

Giant cell tumour (GCT) is a common bone tumour with variable growth potential. Though generally classified as benign, it tends to recur after local removal. Frankly malignant variants are also known.



### PRIMARY MALIGNANT TUMOURS

#### Osteosarcoma (Osteogenic Sarcoma)

Osteosarcoma is a highly malignant primary bone tumor, characterised by formation of osteoid or bone by the tumour cells.

## Clinical features

Pain is usually the first symptom, soon followed by swelling. Pain is constant and boring, and becomes worse as the swelling increases in size.



## Ewing's Sarcoma

This is highly malignant tumour occurring between the age of 10-20 years, It commonly occurs in long bones (in two-third cases), mainly in the femur and tibia.

About one-third of cases occur in flat bones, and usually in the pelvis and calcaneum.

## Ewing sarcoma



## Clinical features

The tumour occurs between 10-20 years of age, sometimes up to 30 years. The patient presents with pain and swelling. Often there is an associated fever, in which case it may be confused with osteomyelitis. On examination, the swelling is usually located in the diaphysis and has features suggesting a malignant swelling.

## Multiple Myeloma

It is a malignant neoplasm derived from plasma cells. The neoplasm characteristically affects flat or irregular bones i.e., the pelvis, vertebrae, skull, and ribs.

## Clinical features

The tumour affects adults above forty years of age. Men are affected more often than women. Usual presentation is that of multiple site involvement. Common presenting complaint is increasingly severe pain in the lumbar and thoracic spine. Pathological fractures, especially of the vertebrae and ribs may result in acute symptoms.