

## Parameters before chemotherapy

### Case 373

#### 4. Enchondroma

##### 【Progress】

She received a orthopedic cast for patella fracture. No treatment was scheduled for a lesion at left distal femur.

##### 【Discussion】

Exostosis is an lesion of extra bone growth. When it contains bone tissue, it is called osteoma. When it contains chondritic component covered with osseous tissue, it is called chondroma. When chondroma emerges and grows in bone, it is called enchondroma (1, 2).

Enchondroma occurs carpal, tarsus and long bones. Solitary enchondroma of the hand occurs most in proximal phalange (40-50%) followed by metacarpals (30%), middle phalange (20-30%), and carpals (<2%). It can occur in ribs (3, 4).

The specific figure image of chondroma on radiograph or CT is the osteolytic lesion with small ossification inside. Cartilage itself is osteolytic and forms osseous component. Chondroma arising from cartilage is basically osteolytic and forms osseous component like normal cartilage.

Enchondroma is composed of hyaline cartilage and proliferative chondrocytes. There are three cartilages, hyaline cartilage, fibrous cartilage and elastic cartilage; hyaline cartilage exists at joints, rib cartilage, trachea cartilage; fibrous cartilage exists at intervertebral disk, knee meniscus; elastic cartilage exists at nasal cartilage, auricular cartilage (3, 4). Of these, chondroma and enchondroma contain hyaline cartilage. Ossification of enchondroma is a resultant product from chondroma. The figure of ossification is arch-like or ring-like. Enchondroma is deficit of infiltrative character, indicative of smooth margin. It is reported that histologic specimen cannot supply information for differentiating enchondroma or chondroma from chondrosarcoma.

Radiologically, enchondroma is an osteolytic lesion associated with arc or ring-like calcification (5-7). Enchondroma on pharynges appears mainly as an osteolytic lesion, while enchondroma on long bone appears mainly as an osteolytic lesion with calcification in its inside (5-7).

Basically, enchondroma and chondroma are benign but have a possibility of being pathological fracture. As differential diagnosis, chondrosarcoma and bone infarction are listed. Present and past illness history is sometimes useful for their differentiation.

Patella fracture is categorized into transverse, longitudinal and complex. Transverse patella fracture is recommended to receive operative fixing while longitudinal fracture is done cast fixation. In our case, minor transverse fracture is found out. She intended to receive an orthopedic cast fixation. Enchondroma of distal femur left as a not-touch lesion.

## **【Summary】**

We presented a seventy-one-year-old female with patella fracture and enchondroma at distal femur. It is borne in mind that enchondroma is termed chondroma emerging and growing in bone. Enchondroma is composed of hyaline cartilage and proliferative chondritic cells producing arc or ring ossification. When enchondroma emerges in hand or foot pharynges, osteolytic lesion mainly comes out while when it does in long bone, osteolytic lesion with ossification in its inside comes out.

## **【References】**

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