

## CASE REPORT

### OSTEOCHONDROMA OF MIDDLE PHALANX OF FINGER: A CASE REPORT

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**ABSTRACT:** Osteochondroma is a cartilaginous tumor and is usually benign. It is the commonest bone tumor.<sup>1</sup> It usually develops in the second decade of life and typically involves the ends of long bones, very common on either side of the knee joint, around 40% of them occur at the lower end of femur or upper end of tibia, upper end of humerus is the next common site. When they occur in the phalanges,<sup>2</sup> it is commonly seen in either Proximal or Distal phalanges or sometimes as Intra-articular lesion.<sup>3</sup> here we report a very rare case of Primary Osteochondroma occurring in the middle phalanx.

**KEYWORDS:** Primary Osteochondroma, Middle phalanx.

**INTRODUCTION:** Osteochondroma is a benign cartilaginous neoplasm that consists of a pedicle of normal bone covered with a rim of proliferating cartilage cells, usually grows away from a joint. Commonly seen in patients 10-25 years of age.<sup>4</sup> the lesion is frequently not noticed, unless it is symptomatic or of large size. Multiple osteochondromas are inherited and are referred to as Hereditary Multiple Exostoses. Solitary osteochondromas may be either primary due to a developmental anomaly of bone, or secondary following trauma. Unlike primary osteochondromas, secondary lesions are often seen in the phalanges of the hands and feet and have their peak incidence in the 3rd and 4th decades of life. Multiple osteochondromas represent an autosomal dominant hereditary disorder and are associated with bony deformities.

**CASE REPORT:** An 18 year old young lady presented to the OPD with swelling of left ring finger over the radial aspect of the middle phalanx (Fig. 1). There was no pain. The swelling was there for as long as she remembered and came to us now for cosmetic reasons. She gave no history of trauma to the finger.

On examination, the left hand showed irregular swelling of middle phalanx of ring finger, which was bony hard, non-mobile and non-tender. There were no pressure symptoms, the skin over the swelling was normal. The movements in the Proximal and Distal Inter-phalangeal joints were normal. Skeletal survey showed no other bony swelling in the body, as these lesions usually occur in multiple sites.

X-ray left hand (Fig. 2) showed irregular cauliflower like growth from middle phalanx of left ring finger, without any clear-cut demarcation between phalanx and the growth, growing away from the joint. Proximal and distal phalanges appeared normal.

Excision of the bony swelling was carried out under finger block and the excised mass sent for histo-pathological examination which confirmed the diagnosis.

**DISCUSSION:** Osteochondroma Synonym(s): solitary osteochondroma [osteochondroma + G. chondros, cartilage, + -oma, tumor].

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The commonest bone tumour, 10-15% of all bone tumours, comprising up to 45% of benign bone tumours. Usually develop in the second decade of life and typically involves the ends of long bones but any bone can be affected, very common on either side of the knee joint, around 40% of exostoses occur at the lower end of femur or upper end of tibia. The osteochondroma can be Pedunculated (When a stalk is present) or Sessile (No stalk). Most are asymptomatic but typical signs and symptoms, when present, include pain from irritation, a painless mass, and a pathologic fracture through an elongated stalk.<sup>5</sup> Growth of these lesions is rare after skeletal maturity.<sup>6</sup>

The risk of malignant transformation (Typically chondrosarcoma) is extremely rare, less than 1% in a solitary lesion. However, there is an inherited condition known as osteochondromatosis Or Hereditary Multiple Exostoses where multiple bones are involved. The risk of malignant transformation of one of these lesions is significantly greater than in the solitary form, estimated up to 25-30%, so close attention should be paid to any new symptoms developing in these patients.<sup>7</sup> A sessile lesion is more likely to transform into a malignant lesion than a protuberant osteochondroma. Treatment includes surgical removal of lesions that cause deformity, pain or restricted range of motion.

The occurrence of Osteochondroma in the small long bones of Hands and feet are rare, usually secondary osteochondromas are seen in phalanges and the main cause of formation of secondary osteochondromas is Trauma. When it occurs in Hands or Feet it is usually seen in the Phalanges, Metacarpals and Metatarsals. When they occur in the phalanges it is commonly seen in either Proximal or Distal phalanges or sometimes as Intra-articular lesion.

In our case Primary osteochondroma arose from the middle phalanx which is quite rare and we could find very few references in the literature. We are reporting this case because of its rarity.

### FIGURES:



**Fig. 1: Osteochondroma middle phalanx of ring finger**



**Fig. 2: X-ray of osteochondroma middle phalanx**

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