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Hand Chondroma – A Case Report

Dr. Pushkar A Deshpande | Assistant Professor, Department Of Surgery, Shrimati Kashibai Navale Medical College, Pune.

ABSTRACT

Soft tissue chondromas are rare tumors. They are benign & slowly progressive in nature. It presents as a slowly growing mass, most commonly in the hands and feet.

It should be differentiated from benign tumors like ganglion cyst, myositis ossificans, pseudomalignant osseous tumor etc.

We report a case of hand chondroma at wrist dorsal aspect. 53 yrs male patient, farmer by occupation, presented with a painless hard mass over right wrist dorsal aspect which had grown slowly for 2 years. FNAC was inconclusive-ray shows no evidence of synovial connection. Excisional biopsy done revealed well encapsulated white hard tumor, microscopic examination confirmed presence of hyaline cartilage indicating extraskeletal soft tissue chondroma. 6 month follow up showed no evidence of recurrence.

KEYWORDS : Chondroma, hand tumors, extraskeletal tumors

Introduction:

Soft tissue chondromas are rare tumors. They are benign & slowly progressive in nature.1, 2, 3. It is most commonly found in hands & likely to be undiagnosed clinically1. Microscopic examination usually reveals the correct diagnosis. We report a case of hand chondroma at wrist dorsal aspect.

Material & Methods:

53 yrs male patient, farmer by occupation, presented with a painless hard mass over right wrist dorsal aspect (fig1) which had grown slowly for 2 years. The mass was located at dorsal aspect of right hand.

It was 6 cm x 3 cm x 2 cm, hemispherical, hard in consistency, painless, not fixed to the superficial or deep tissues .It was not compressible, no bruit, there were no dilated vessels over the mass.

The overlying skin was normal. Fine needle aspiration cytology was inconclusive. X-ray revealed no periosteal reaction nor any erosion of the cortical bone.

Fig1: Location of tumor

An excision biopsy was done. A well encapsulated tumour was found at surgery, (fig 2) without any connection with joint synovium or periosteal tissue. Excision was easy and complete. Wound healing was uneventful.

Fig. 2: Intraoperative findings.

Results:

Histopathological examination confirms the diagnosis of soft-tissue chondroma and showed hyaline cartilage (fig 3, 4). At 6 month follow-up, there was no recurrence. Digital mobility was not affected and there was no loss of sensation or abnormal sensation. Patient was satisfied with the result.

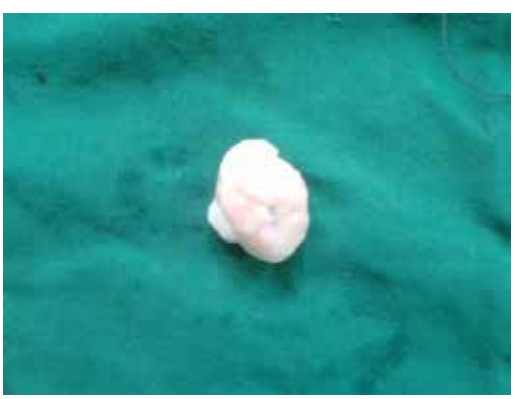

Fig 3: Gross appearance of tumor

Fig 4: Microscopic examination showing Hyaline cartilage

Discussion:

Soft tissue chondroma is a rare benign tumors in the hands and feet. It affects both sexes equally and mainly occurs in patients aged 30 – 60 years[1].It presents as a slowly growing mass, most commonly in the hands and feet.[1, 10.]

It should be differentiated from benign tumors like ganglion cyst, myositis ossificans, pseudomalignant osseous tumor, ossifying fibromyxoid tumor, synovial chondromatosis, osteochondroma, or a malignant tumor like chondrosarcoma, extra skeletal osteosarcoma and synovial sarcoma[2,3.].Diagnostic errors can be avoided if any soft tissue lesion

that cannot be diagnosed is regarded as potentially malignant until proven otherwise [3,9].

Soft tissues chondromas arise principally in extremities (96%) with 72% in the upper limb, 24% in the lower limb, 2% in the head and neck and 2% in the trunk[1]. There are several theories explaining their origin in the soft tissues: Dahlin and Salvador[5] believed that the chondroma grow from a synovial sheath; however, Uehara and Becker[6], and Rosenfeld and Kurzer[7] support the theory of activation of islands of heterotopic cartilaginous tissue.

Soft-tissue chondromas are reported to be well circumscribed tumours often with an ovoid shape.The sizes of soft-tissue chondromas are typically small, no more than 3 cm [4]. In our case it was 6 cm. Lesions have well-defined margins, and usually grow slowly; this makes it possible to perform complete excision.

Primary biopsy is not indicated [8].Microscopic examination usually reveals the correct diagnosis. Recurrences have been reported in the literature in 18% and seem to be related to incomplete excision [4].

Conclusion:

Soft tissue chondroma although rare are important in differential diagnosis of hand tumors Histopathological examination confirms the diagnosis, excision should be complete to avoid recurrences.

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