

CASE REPORT

COSTAL OSTEOCHONDROMA OF RIB: CASE REPORT

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ABSTARCT: We here with present a case of osteochondroma of the (L) 8th rib, in a child 8 years of, one year duration. He presented with pain and swelling which are gradually increasing. After thorough investigation we have excised the tumor and sent for histopathological examination.

KEYWORDS: Costal osteochondroma of rib.

INTRODUCTION: Tumors of the chest wall represent 2% of all tumors of the body. They may be primary or metastatic, benign or malignant.⁽¹⁾ Osteochondroma of the rib is exceedingly rare. They may present as swelling in the chest wall or they may be incidental finding of the chest radiology. Costal osteochondroma is rare but important condition to recognize due to its complications such as reduced range of movement, pain, cosmetic abnormalities and bursitis. Osteochondroma tend to grow into the chest cavity and such lesions are exophytic.⁽²⁾ Osteochondroma actually represent a developmental physical growth defect. The defect occurs in circumferential ring of fibrous tissue (Perichondrium). The ring of Ranvier covering the epiphyseal plate. Results of such a defect are lateral growth of epiphyseal cartilage plate instead of normal downward growth towards the metaphysic. This abnormal growth gives rise to a lateral cartilage protuberance. Whether a stalk or sessile all osteochondromas have direct communications with the cortex and the marrow cavity of the underlying bone. The osteochondromas stop growing at the time nearest epiphyseal plate fuses.⁽³⁾

CASE REPORT: An 8 years old male child came with complained of pain swelling on the left side chest wall, on examination 1cm. x 1cm. Bony hard swelling was noted on the 8th rib. Chest X-Ray and C T Evaluations was done, which shows a mass protruding from the 8th rib. As patient is complaining of pain and increasing the size of the swelling the tumor was excised Histopathology confirmed the diagnosis of osteochondroma, and no evidence of malignant cells were found.

DISCUSSION: The reported incidence of coastal osteochondroma is very low, however the actual incidence is likely to be under estimated because coastal osteochondroma almost always arise at or near the coast chondral junction, and are usually asymptomatic. Although the location of bony portion of osteochondroma can be reliably determined using multy planar C T reconstruction, the exact size of the tumor may be under estimated because of cartilage cap of the tumor is not detectable by CT scan. MRI scan imaging is the best radiological modality for evaluating hyaline cartilage cap.⁽⁴⁾ Rarely coastal exostosis may cause some complications such as heemothorax, diaphragmatic, peri-cardiac wounds. In case of symptomatic exostosis a surgical removal to avoid such a complications are advised. If the exostosis is asymptomatic abstention

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can be recommended.⁽⁵⁾ Differential diagnosis of the rib lesions include enchondroma, osteoblastoma, osteoid osteoma, chondroblastoma, hemangioma and chondrosarcoma. osteochondromas are frequently asymptomatic and development of pain may signify malignant desecration.⁽⁶⁾

Tumors of the chest wall comprise approximately 2% of all tumors of the body and may be primary or metastatic, benign or malignant.⁽¹⁾ 90% are solitary can occur in multiple sites.

CONCLUSION: A case of exostosis arising from the left 8th rib was excised surgically. Histopathology confirmed the lesion to be osteochondroma.

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Fig. 1: 3D CT scan Shows osteochondroma of rib



Fig. 2: CT Scan coronal cut

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Fig. 3: CT Scan shows pedaculated mass



Fig. 4: CT Scan shows continuity of medullary canal



Fig. 5: CT Scan shows continuity of medullary canal



Fig. 6: CT Scan coronal cut

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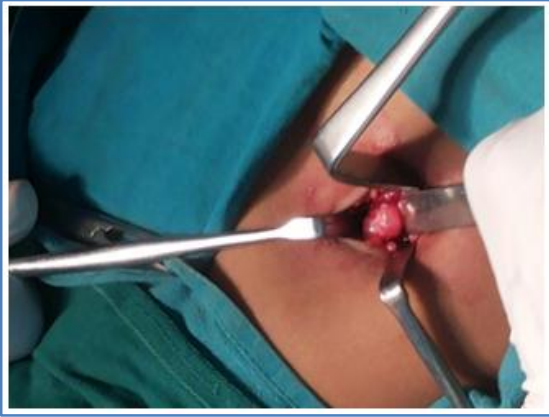


Fig. 7: Per operative PH

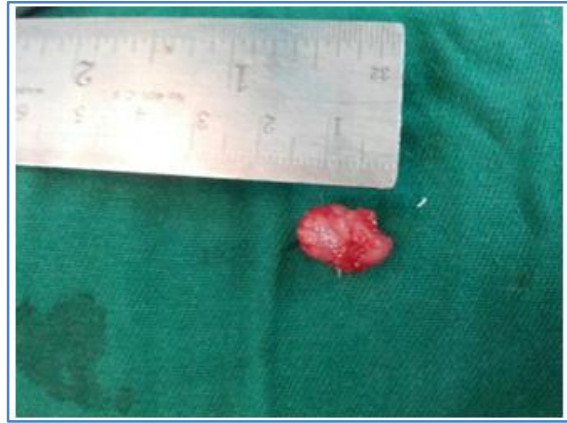


Fig. 8: Excised Osteochondroma mass

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