Solitary Sessile Osteochondroma of Scapula, A Rare Case Report

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ABSTRACT
Osteochondromas are the most common benign tumours of bone. These are most commonly seen on the metaphysis of a long bone, but they can arise from any bone which is preformed from cartilage. To the best of our knowledge, very few cases of osteochondroma scapula have been reported in literature. We hereby report a very rare case of osteochondroma which arose from scapula in a four year old boy, which was treated by excisional biopsy.

CASE VIGNETTE
A swelling was noticed over the right scapula of a four year old boy by his parents since the past one year, which showed progress since past 6 months [Table/Fig-1]. On examination, no similar swelling was seen, which arose from else where in the body. Family history was not significant. On examination, a 4x3cm bony swelling which arose from body of left scapula was noticed. The swelling was hard in consistency, it had a smooth surface and it was immobile, but it moved with scapula. Skin over the swelling was normal and there were no neurological deficits. Forward flexion, abduction and extension of shoulder joints were restricted terminally.

Plain radiograph of right shoulder revealed a mushroom shaped, solitary osteochondroma. MRI showed a bony swelling of size, 30x17mm, which arose from the dorsal surface of the body of the scapula. The cartilage cap thickness was 5mm. The cortex and the medullary cavity were continuous with the scapula. There was no associated soft tissue mass or pathological fracture.

He was taken up for excisional biopsy, as the swelling restricted his shoulder movements and was cosmetically not acceptable [Table/Fig-2]. Under general anaesthesia in prone position, an oblique incision was made and the entire tumour was excised. Histopathological examination concurred with our preoperative diagnosis. There was no evidence of malignant changes. Post-operative period was uneventful and the boy regained appreciable shoulder range of motion with physiotherapy. After six months of follow-up, there was no evidence of recurrence. Histopathological examination showed normal appearing chondrocytes which were covered by hyaline cartilage. There is no evidence of any malignant transformation [Table/Fig-3].
Swelling in the axilla, pain and swelling

Osteochondromas of the scapula are the most common tumours of the scapula, and these are best evaluated by CT scan or MRI [2-5]. Osteochondromas are pseudotumours with developmental malformations around the growth plate [1]. These are seen in children, mostly during rapid skeletal growth and they arise from any bone in the body which is preformed in cartilage. Distal femur, proximal tibia and proximal humerus are the most common sites. Osteochondromas tend to grow during paediatric age group and this growth can occur till third decade of life. Malignant transformations are extremely rare in children and they are uncommon in adults. Malignant transformation occur when the lesion involves, pelvis and proximal femur. The incidence of malignant degenerations in solitary osteochondromas is 1% and in multiple osteochondromas, it is 5%. A malignant transformation should be suspected when there is a sudden increase in growth in an adult who is more than 30 years of age. In malignant transformations, the cartilage thickness is more than 2cm and these are best evaluated by CT scan or MRI [2-5].

Osteochondromas are the most common tumours of the scapula, which account for 4.6% of all bone tumours [6]. They are more common on the ventral side of the scapula. Osteochondromas of ventral scapula can lead to various complications like bursa formation, pseudowinging of scapula, snapping syndrome and restricted movements of the shoulder. Excisions of osteochondromas had relieved the symptoms in previously reported cases [7-10] [Table/Fig-4].

In our case, we planned an excision because the osteochondroma had rapidly increased in size since past six months. The swelling also caused pseudowinging of scapula and terminal restriction of movements. On follow up, pseudowinging of scapula improved and regained full range-of-motion. There was no recurrence of swelling.

CONCLUSION
Osteochondromas of scapula are very rare, benign bone tumours. They can cause pseudowinging of scapula, pain and restriction of shoulder movements. Open or arthroscopic excision of tumours will relieve most of these symptoms.

REFERENCES