Spontaneous Regression of Chondroblastoma of Distal Femur

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INTRODUCTION:

We report a rare case of a chondroblastoma which has spontaneously regressed.

REPORT:

A 6 year old boy presented with a left knee swelling for 3 weeks. On examination there was an ill defined tender bony swelling over medial femoral condyle with no intraarticular effusion. ESR and CRP were normal. Xray showed lytic lesion over epiphysis of medial femoral condyle. MRI of left knee showed a gadolimium enhancing subarticular lesion with thin sclerotic rim measuring 0.91cm x 1.42cm x 0.76 cm with associated adjacent marrow edema. These are consistent with chondroblastoma at epiphysis of left medial femoral condyle. A conservative treatment was chosen and he was seen in clinic every 6 months. At 2 years after initial diagnosis the tumor was found to has regressed spontaneously.

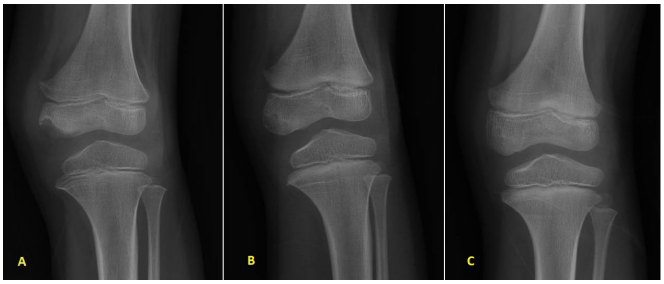

Figure 1: AP view of left knee at presentation (A), 6 months (B) and 2 years (C)

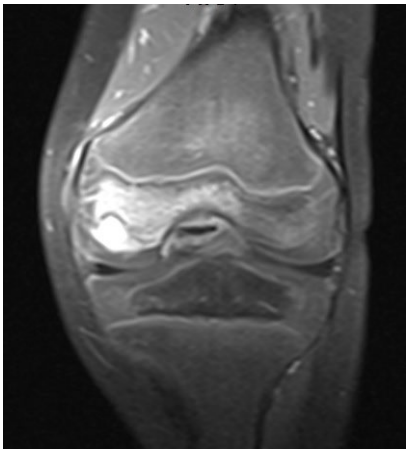

Figure 2: MRI coronal view of left knee

Chondroblastoma is a benign neoplasm which arises in the epiphysis or apophysis of long bones, most commonly proximal and distal femur, proximal tibia and proximal humerus. It accounts for less than 1% of all bone tumours[1]. Most cases are diagnosed in the second or third decade of life, with a predominance of male over female patients (2:1)[2]. On radiography there is a well demarcated lytic lesion with a thin rim sclerotic bone[2]. MRI usually shows extensive edema surrounding the lesion. Differential diagnoses include osteomyelitis, osteoid osteoma, giant cell tumour and osteosarcoma. Complete surgical curettage, with or without bone grafting and chemical cauterization is the primary treatment of choice[2]. There is a high local recurrence rate, between 14% to 18%[2], with the interval of recurrence between 6 months to 8 years[2]. To date there is a dearth of case report of spontaneous regression of chondroblastoma.

CONCLUSION:

Chondroblastoma is a rare benign neoplasm affecting the long bones of paediatric patients. Complete surgical curettage with or without bone grafting and chemical cauterization is the main mode of treatment. Due to the high recurrence rate, the patient must be followed up until skeletal maturity.

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