

Chondroblastoma

The chondroblastoma is a benign, cartilage-forming tumor seen in the epiphyseal-metaphyseal location of children or young adults. The histological appearance is typical of a giant cell tumor seen in young adults. The chondroblastoma is one-fifth as common as the giant cell tumor and the majority of cases will occur during the second decade of life. It is rare to find the giant cell tumor in patients under 13 years of age. The most common location for the chondroblastoma is in the epiphyses of the distal femur, proximal tibia and proximal humerus. These lesions are usually located near a joint and are quite painful because of a secondary inflammatory synovitis of the adjacent joint that can masquerade as a pyarthrosis. It is not unusual to find an aneurysmal bone cyst associated with the chondroblastoma, similar to the situation seen with giant cell tumors. Under the microscope, round polyhedral-shaped stromal cells located in clear cytoplasmic halos give the appearance of chicken wire. Giant cells are frequently associated with the chondroid tissue. It is very rare for a chondroblastoma to convert into a malignant tumor, however, as in the case of giant cell tumor, it can metastasize to the lung and still carry an excellent prognosis for survival.

Treatment consists of a simple curettement of the lesion followed by packing of the defect with either bone graft or methyl methacrylate. There is a relatively low (10 per cent) recurrence rate.