Chondroblastoma

Objectives

1. Describe the usual age of diagnosis, radiographic features, and usual anatomic sites of chondroblastoma
2. Discuss the natural history and treatment of chondroblastoma

Discussion

Chondroblastoma accounts for about 1% of bone tumors. It is most common in the second decade of life. The primary site of origin is the epiphysis; it is the most common tumor affecting the epiphysis in children. The proximal humerus, proximal tibia, and proximal femur are most often affected. Presenting symptoms are usually that of joint dysfunction or synovitis. The radiographic, CT, and microscopic features are characteristic, and there is seldom difficulty with differentiation from other lesions. Radiographically, chondroblastoma is radiolucent, with small foci of calcification. It is generally surrounded by a rim of reactive bone. CT scanning is helpful. The lesion is locally aggressive, and curettage is indicated if the diagnosis is made. Results are generally quite satisfactory; a few patients have secondary arthritis. Chondroblastoma does not seed into the joint following surgical extirpation. In the two largest series (Ramappa and Springfield), the local recurrence rate was 15%. Tumors of the proximal femur appear most likely to recur. In the series of Ramappa, rate of metastatic disease was 4%, so chondroblastoma is for the most part, but not exclusively, a benign tumor.

References