Secondary Peripheral Chondrosarcoma

The most common form of secondary peripheral chondrosarcoma is seen in patients with multiple hereditary exostosis and occasionally in patients with solitary exostosis. The lesion occurs in a younger age group than does primary central chondrosarcoma. Because of the slow rate of growth and mild symptoms of pain, the lesion can become a considerable size before a diagnosis is made. The most common site is the pelvic area, followed next by the proximal femur, proximal humerus, and scapula. On ordinary radiographs, there is a characteristic flocculated calcific pattern in the cartilaginous tumor lying on the surface of the bone immediately adjacent to a preexisting osteochondroma or exostosis. The tumor does not invade the medullary canal of the subadjacent bone from which it originated. Most authorities feel that the cartilaginous cap of a benign lesion is usually less than 2 cm. When the cartilaginous cap exceeds 2 cm in thickness, one should become suspicious for a malignant transformation. The overall prognosis for the secondary peripheral type of chondrosarcoma is excellent compared to that of the primary or central chondrosarcoma and, thus, surgical management can be relatively conservative with fairly close margins. Radiation therapy and chemotherapy are of no use with this tumor.