

Low-grade Intramedullary OGS

Low-grade intramedullary OGS is another rare low-grade fibro-osseous variant of the osteosarcoma that is unique because it is totally confined within the cortical anatomy of a long bone, most typically around the knee joint. It occurs in an older age group than the classic OGS, typically between the ages of 15 and 55 years. It affects males and females equally. The radiographic appearance is that of a diffuse sclerotic change within the metaphysis of the long bone with no periosteal response or lytic destruction of the cortical anatomy. The smoky appearance of the metaphyseal bone suggests the diagnosis of chronic osteomyelitis or, perhaps, fibrous dysplasia. Microscopically, the tumor has a histological appearance similar to parosteal OGS and because of this carries the same excellent prognosis for survival as the parosteal sarcoma. The treatment is similar without the use of adjuvant chemotherapy or radiation therapy. The lesions are treated with complete wide resection that frequently involves a total knee replacement, similar to the surgical treatment for a classic osteosarcoma.