Malignant Fibrous Histiocytoma of Bone

Malignant fibrous histiocytoma of bone is a relatively new pathological entity in bone tumors, compared to soft tissue tumors where malignant fibrous histiocytoma is a more common tumor. Malignant fibrous histiocytoma (MFH) of bone occurs in a middle or older age population, more commonly in males than in females. It is found typically in the same locations as fibrosarcoma or osteogenic sarcoma, including the distal femur, proximal tibia, and proximal humerus. Radiographically, it is an aggressive permeative lesion in metaphyseal bone with significant cortical destruction that can break out into the adjacent soft tissue. Histologically, there are malignant fibroblasts as well as atypical histiocytes and giant cells, exactly as is seen in soft tissue MFH. The prognosis is quite guarded because this is usually a high-grade lesion with a high potential for metastasis to the lung, similar to fibrosarcoma and osteosarcoma. Treatment consists of wide surgical resection with prosthetic reconstruction, when possible, along with adjuvant chemotherapy to reduce the chance of pulmonary metastases.