Radical Resection of the Left Humerus With Free Vascularized Fibula Epiphyseal Transfer

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This video reviews the case presentation of a 12-year-old boy with a growing mass in the left shoulder. Physical examination revealed a large, palpable mass of the left proximal humerus and decreased shoulder range of motion. Imaging studies confirmed a large lesion of the left proximal humerus, which was suspected to be a large primary bone sarcoma. Pathology confirmed a high-grade sarcoma with bone formation consistent with osteosarcoma. The patient underwent 10 weeks of neoadjuvant chemotherapy followed by surgical local tumor control. This video shows radical resection of the patient's left proximal humerus, reconstruction with the use of a free vascularized fibula, and epiphyseal transfer. The video provides in-depth visualization of this unique procedure and postoperative imaging studies.