

MR Imaging of Bone Tumors - A pictorial review

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The therapy of bone tumors generally depends on the extent of the tumor, its growth behaviour as well as its exact histological diagnosis. Although conventional x-ray is the basis of diagnosis, MR imaging today is the method of choice for evaluating of soft tissue components and extent of the tumor. Unlike most of the other imaging modalities MR imaging allows exact tumor staging, which generally is essential for treatment. The aim of our exhibit is to show typical MR imaging patterns of malignant bone tumors such as osteosarcoma, Ewing sarcoma and metastases as well as benign tumors and tumor-like lesions that are often incidentally found on MR imaging studies for other reasons. Furthermore imaging findings for staging and therapy planning will be presented. Emphasis is laid on typical cases and special DDX by age specific algorithms. Additionally, the appropriate imaging technique is presented.