Clinical Presentation of Bone Tumors

OVERVIEW

Making sense of a newly identified bone lesion can be daunting, but a well-thought-out patient and radiographic evaluation will often reveal specific patterns that aid in a quick and efficient diagnosis. We will discuss the presentation of bone tumors based on patient age at presentation, anatomic location, and associated symptoms (or lack thereof). We will present an algorithm for approaching incidentally discovered lesions, and introduce staging systems of bone tumors that dictate subsequent management.

Bone tumors can present in a myriad of different ways, and the discovery of a tumor can elicit alarm, fear, despair, and panic both for patient and practitioner. However, a well-thought-out, careful, and systematic evaluation can reveal patterns of presentation that will guide the practitioner to the correct diagnosis safely. This process begins with an extremely thorough history and physical examination process, followed by a careful interpretation of appropriate imaging studies, building a differential diagnosis, and ultimately deciding on a plan of care. It is important that the clinician confidently determine whether to observe, biopsy, or perform surgery on a skeletal lesion, and not simply “play the odds” or guess at a plan of action based on an assumption of what is most likely. Misdiagnosis or mismanagement both of benign and malignant lesions can have limb- or life-threatening consequences. For this reason, any practitioner who is not completely confident in his or her plan