A common sense approach to the recognition and diagnosing of tumor and tumor-like conditions of bone

Even experienced pathologists are sometimes intimidated by bone biopsies. Histological similarities between reactive lesions and neoplastic processes can cause concern that a bone tumor has been overlooked or fears of under-diagnosis when tumors are present. A common sense approach to the diagnosis of bone diseases using clinical history with correlative appropriate imaging data can help minimize these concerns. In this presentation I intend on surveying interesting diagnostic problems in orthopedic pathology from patients ranging from very young to very old age. Its objectives are to enable participants to construct logical frameworks for categorizing various bone disorders and to be more comfortable in the differential diagnosis of orthopedic diseases. It is most appropriate for practicing pathologists who only see such lesions rarely and for advanced trainees. I intend to begin with a brief introduction to orient participants to the philosophy of diagnosis in orthopedic pathology and how best to put the gamut of possible diagnoses into a logical framework based upon age at presentation, clinical history, imaging parameters and histology. This will be followed by use of the case presentation format to present unknown cases by age range with the most common diagnostic categories in each range.

At the end of the session I would expect the participant to be able to:

Create a differential diagnosis of bone diseases/neoplasms based on age of patient

Create a differential diagnosis of bone diseases/neoplasms based on which bone as well as site in bone involved

Create a differential diagnosis of bone diseases/neoplasms based on imaging appearance

Recognize the most common bone lesions based on histologic criteria

Identify and differentiate the most common benign and malignant primary tumors of bone

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