Fine Needle Aspiration of Bone Tumours
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The Clinical, Radiological, Cytological Approach

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At the beginning of the 1960s Nils Stormby, at that time head of the recently founded Cytodiagnostic Laboratory, introduced fine needle aspiration (FNA) and cytodiagnosis as the primary diagnostic modality in cases of bone tumours/lesions in Lund, Sweden. When the Musculoskeletal Tumour Centre was created at the University Hospital, FNA became the primary diagnostic method for bone tumours/lesions in patients referred to the centre. From the beginning, the centre’s orthopaedic surgeons and radiologists established a close working relationship, and their experience clearly demonstrated the importance of the clinical, radiological and cytological approach to diagnosis. In 1973, the diagnostic outcome of the first 94 cases, which were investigated between 1966 and 1969, was presented and discussed [1].

Although it has been strongly recommended that patients with suspected bone tumours/lesions should be referred to multidisciplinary centres for primary diagnosis and treatment, in practice this is not always the case, especially in patients with suspected metastatic deposits. The purpose of this book is to emphasize the value of the combined diagnostic approach, and to facilitate the cytological evaluation of FNA smears from hard tissue lesions. We also suggest criteria for histotype diagnosis based on the combined evaluation of clinical and radiographic data and cytologic features. Our main aim is to thoroughly describe and illustrate the most common entities. A number of primary bone tumours/lesions, benign as well as malignant, are very rare and their cytologic features have been described only incompletely, if at all.

The use of adjunctive diagnostic methods is also described, discussed and illustrated. The selection of entities described and illustrated are based mainly on experiences with patients referred to the Musculoskeletal Centre over a 35-year period. Case reports and illustrations are culled from cases in the files of the Department of Pathology and Cytology, Lund University Hospital, which now comprise smears from approximately 1,000 hard tissue tumours/lesions dated between 1966 and 2006.

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