Fine Needle Aspiration of Bone Tumours
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Fine Needle Aspiration of Bone Tumours

The Clinical, Radiological, Cytological Approach

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88 figures, 61 in color, and 10 tables, 2010
Contents

XI  Preface
Chapter 1
1  Epidemiology of Bone Tumours

Chapter 2
3  Radiological Investigation of Bone Tumours
3  Tumour Type and Radiological Appearance
   3  Tumour Matrix Calcifications
   3  Periosteal Reaction
   4  Soft Tissue Component
   4  Tumour Position
   5  Other Investigations
   5  Magnetic Resonance Imaging
   5  Computed Tomography
   5  Ultrasonography
   5  Scintigraphy
   5  Positron Emission Tomography
   6  Fine Needle Aspiration Cytology
   6  Conclusion

Chapter 3
7  Morphological Diagnosis of Bone Tumours
   7  Biopsies
   7  Open Biopsy
   7  Percutaneous Biopsy
   7  Fine Needle Aspiration Cytology
   7  FNAC Procedure
   8  Staining Methods
Cytology of Normal Constituents in Bone Aspirates and of Reactive Changes

Normal Cells in Bone Aspirates
- Osteoblasts
- Osteoclasts
- Chondrocytes
- Bone Marrow Cells
- Mesothelial Cells

Reactive Changes
- Pseudomalignant Myositis Ossificans

Cytological Features of Bone Tumours in FNA Smears I: Osteogenic Tumours

Osteoid Osteoma and Osteoblastoma
- Radiology
- Histopathology
- Cytological Features of Osteoblastoma
- Differential Diagnosis
- Comments

Osteosarcoma
- Radiology
- Histopathology
- Cytological Features
- Differential Diagnosis
- Comments

Case Report 1
- Comments

Case Report 2
- Comments

Cytological Features of Bone Tumours in FNA Smears II: Cartilaginous Tumours

Chondroma
Chapter 7

Cytological Features of Bone Tumours in FNA Smears III: Ewing Family Tumours

The Ewing Family of Tumours

Radiology

Histopathology

Cytological Features

Differential Diagnosis

Comments

Case Report 3

Comments
Chapter 8

51 Cytological Features of Bone Tumours in FNA Smears IV: Notochordal Tumours

51 Chordoma
51 Radiology
51 Histopathology
52 Cytological Features
52 Differential Diagnosis
52 Comments
53 Case Report 5
54 Comments

Chapter 9

55 Cytological Features of Bone Tumours in FNA Smears V: Giant-Cell Lesions

55 Conventional Giant-Cell Tumour
55 Radiology
55 Histopathology
56 Cytological Features
56 Differential Diagnosis
56 Comments
57 Aneurysmal Bone Cyst
57 Radiology
57 Histopathology
57 Cytological Features
58 Differential Diagnosis
58 Comments
58 Giant-Cell Reparative Granuloma
58 Radiology
58 Histopathology
59 Cytological Features
59 Differential Diagnosis
60 Comments
60 Osteitis Fibrosa Cystica
60 Radiology
60 Histopathology
60 Cytological Features
60 Differential Diagnosis
61 Comments

Chapter 10

62 Rare Targets for FNAC and Diagnostic Problems with Benign Tumours/Lesions with Variable Numbers of Osteoclast-Like Giant Cells

62 Rare Targets: Metaphyseal Fibrous Defect
62 Radiology
62 Histopathology
62 Rare Targets: Fibrous Dysplasia
62 Radiology
Chapter 11

**Lymphohaematopoetic and Histiocytic Tumours**

**Solitary Plasmacytoma of Bone**
- Radiology
- Histopathology
- Cytological Features
- Differential Diagnosis
- Comments

**Primary Lymphoma of Bone**
- Radiology
- Histopathology
- Differential Diagnosis
- Comments

**Langerhans Cell Histiocytosis**
- Radiology
- Histopathology
- Cytological Features
- Differential Diagnosis
- Comments

Chapter 12

**Inflammatory Lesions**

**Non-Specific Osteomyelitis**
- Radiology
- Histopathology
- Cytological Features of Acute Osteomyelitis
- Differential Diagnosis
- Comments

**Tuberculous Osteomyelitis**
- Radiology
- Histopathology

Chapter 13

**Bone Metastases**

**Metastatic Cancer**
- Radiology
- Cytodiagnosis
- Diagnostic Problems
- Case Report 6
- Comments
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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