Illustrated Pathology of the Bone Marrow

This book provides a highly illustrated overview of the diseases of the human bone marrow. It will help experienced clinicians and those in training to answer the practical diagnostic questions that arise during the routine analysis of bone marrow core biopsy specimens. Throughout the text, histologic interpretation is integrated with clinical and laboratory findings. Emphasis is placed on the evaluation of peripheral blood, aspirate smear, clot section, and core biopsy, as well as ancillary techniques including flow cytometry and immunohistochemistry, in the diagnosis of hematologic disorders of the marrow. The text is illustrated with numerous color figures, charts, and tables, and descriptions of real case situations using the most up-to-date classification systems. *Illustrated Pathology of the Bone Marrow* should be read by all pathologists, hematologists, and laboratory technicians involved in the analysis of bone marrow specimens.

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To my parents, to Maria, my wife and best friend, and to Giulia and Rita, our marvelous daughters – AO

To my wife, Karene, who is always there to support me – DPO

To my parents and to my wife, Carol – DAA

Contents

Preface *page* ix

1 Introduction 1

2 The normal bone marrow and an approach to bone marrow evaluation of neoplastic and proliferative processes 5

3 Granulomatous and histiocytic disorders 16

4 The aplasias 22

5 The hyperplasias 31

6 Other non-neoplastic marrow changes 39

7 Myelodysplastic syndromes 43

8 Acute leukemia 58

9 Chronic myeloproliferative disorders and systemic mastocytosis 73

10 Myelodysplastic/myeloproliferative disorders 88

11 Chronic lymphoproliferative disorders and malignant lymphoma 93

12 Immunosecretory disorders/plasma cell disorders and lymphoplasmacytic lymphoma 110

13 Metastatic lesions 119

14 Post-therapy bone marrow changes 124

Index 133

Preface

Illustrated Pathology of the Bone Marrow is designed to help pathologists and pathologists in training answer the practical diagnostic questions that arise during routine analysis of bone marrow core biopsy specimens. Although emphasis has been placed on the histologic interpretation of the bone marrow biopsy, an attempt has been made to integrate histologic findings with clinical and laboratory features and peripheral blood and bone marrow aspiration morphology. In recent years, integration between morphology, immunophenotype, genetic features, and clinical features has been increasingly used to distinguish between distinct clinical entities. This integrated multiparametric approach forms the basis for the WHO classification of tumors of hematopoietic and lymphoid tissue. As a consequence, morphology, immunophenotype, genetics, and clinical features are integrated throughout the book in an effort to summarize the current best practice of bone marrow interpretation. The illustrative case material in this book has been gathered from several institutions, including Indiana University School of Medicine in Indianapolis, Indiana; the College of Physicians and Surgeons of Columbia University, New York, New York; the City of Hope National Medical Center, Duarte, California; and Stanford University, Stanford, California. A systematic, analytical approach to interpretation of pathological changes is used throughout the book, which will enable pathologists with varying backgrounds and experience to feel confident in their assessment of bone marrow specimens during their routine everyday analysis.

Each of us owes a great debt to those who taught us and influenced us. We have each learned a great deal from "giants" in the field of pathology and we wish to acknowledge at least some of those who had the greatest impact on us: Franco Rilke, Richard S. Neiman, Peter M. Banks, Thomas F. Dutcher, Henry Rappaport, and Lawrence M. Weiss.

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