Clinical and Pathological Aspects of Skin Diseases in Endocrine, Metabolic, Nutritional and Deposition Disease
Clinical and Pathological Aspects of Skin Diseases in Endocrine, Metabolic, Nutritional and Deposition Disease
It is a pleasure to introduce this new book, *Clinical and Pathological Aspects of Skin Diseases in Endocrine, Metabolic, Nutritional, and Deposition Disease*, edited by two of my friends and respected colleagues, Franco Rongioletti and Bruce R. Smoller. In fact, I was very enthusiastic when I learned that they were preparing this work. Although endocrine, metabolic, and deposition diseases are regularly included in general textbooks of dermatology and dermatopathology, one gains the general impression that these topics receive little emphasis and are mainly included for completeness. The prospect of having all of this information in one volume, lovingly described and detailed by experts in the field, should be of great interest not only to dermatologists, pathologists, and dermatopathologists but also to internists and endocrinologists, who may well gain a different perspective on these disorders. As a dermatopathologist, I am also pleased that this project has been organized and undertaken by two distinguished authorities in cutaneous pathology. This assures a close integration of histopathology and other laboratory techniques with the clinical aspects of these disorders, which will make it possible – perhaps for the first time – to view these conditions in a truly comprehensive way.

So I invite you, the reader, to open this volume and dig in; be prepared for an eye-catching, intellectually stimulating, and ultimately rewarding experience!

Charlottesville, VA

James W. Patterson
Dermatopathology is a bridge between Dermatology and Pathology. In fact, dermatopathologists are drawn equally from both specialties.

The core of dermatopathology is clinical pathological correlation. While some conditions can be diagnosed on histological grounds alone, this is not without peril. What appears to be a simple seborrheic keratosis under the microscope could represent an epidermal nevus if present in a 2-year-old child. A dermal mucinous deposit makes a mucinosis, but which one? Is it a single lesion or are there multiple lesions? Is there a specific distribution of lesions? Is there an associated condition? The clinical information would likely clinch the right diagnosis.

There are a variety of good textbooks of dermatopathology. However, given the complexity, morphologic variations, and sheer number of dermatological conditions, it is nearly impossible for these textbooks to cover all topics in detail.

Thus, the Clinical and Pathological Aspects of Skin Diseases in Endocrine, Metabolic, Nutritional, and Deposition Disease by Franco Rongioletti and Bruce R. Smoller fills the gap by detailing this heterogeneous group of conditions, which are often covered scantily and found scattered in different sections of other dermatopathology textbooks.

In a compact yet comprehensive way, this text and atlas covers these dreaded disorders. The blend of tables and photographs provides a concise and user-friendly format.

The combined experience of the editors Drs. Rongioletti and Smoller and their coauthors gives this book a distinct advantage.

I congratulate the editors and the authors for a job well done.

St. Louis, MO

Daniel J. Santa Cruz
Preface

We are pleased to present this book entitled “Clinical and Pathological Aspects of Skin Diseases in Endocrine, Metabolic, Nutritional, and Deposition Disease” as a labor of love. Dr. Rongioletti has been studying, diagnosing, treating, and researching cutaneous mucinoses and deposition disorders for years and this work represents his dream of consolidating his amassed experiences into a concise atlas and text for the practicing dermatologist, pathologist, dermatopathologist, endocrinologist, and internist. Dr. Smoller has also been actively interested in cutaneous pathology as a window for systemic diseases and has written extensively on this topic. These editors have assembled a distinguished group of scholars to share their collective expertise regarding these entities. It is the hope of the authors that each chapter will provide insights into the clinical appearance and course of the diseases presented, followed by a review of pathogenesis for each disease, and a close inspection of histopathologic changes and any accompanying special studies that might be required to establish a diagnosis. Subsequent discussions address therapeutic options. For each chapter, key points are highlighted with bullet points to summarize the major features. Clinical photographs and photomicrographs have been included as rapid references for the busy clinician or as study aids for the student of most of the discussed cutaneous diseases.

Although we have tried to minimize repetition, some duplication of some diseases is present among the various chapters and reflects the overlapping features of the endocrine and metabolic pathways, in addition to the different perspectives on a disease process. Sometimes, repetition is the mother of the studies (in Latin repetita iuvant).

Dr. Smoller would like to take this opportunity to thank each of the authors who have contributed so generously their time and efforts in completing this project. He would also like to thank profusely his many students and colleagues who provide him with the continued inspiration to continue with his writings. He would also like to extend a work of public thanks to his coeditor, Franco, whose generous offer and hard work made this project a reality. Mostly, he would like to thank his loving wife of 30 years, without whom none of this work would be worth doing.

Dr. Rongioletti would like to thank his coeditor, Bruce, for his dedication and efforts in making this project possible, all the contributors for their expertise, hard work, and commitment, all the colleagues and friends for their encouragement, Richard A. Hruska, Editor, Clinical Medicine at Springer for his support, and his loving ladies, his mother and his perpetual fiancée, for their patience and sweetness. If a doctor in any part of the world makes a correct diagnosis after looking at a picture or treats a single patient in a proper way after reading a chapter or just a few lines of this book, our efforts will not have been in vain.

Little Rock, AR
Bruce R. Smoller
Genova, Italy
Franco Rongioletti
## Contents

*Foreword I* ................................................................................................................................................................. v

*Foreword II* .................................................................................................................................................................. vii

*Preface* ........................................................................................................................................................................ ix

*Contributors* ................................................................................................................................................................... xiii

### Part I Cutaneous Endocrine Disease

1. **Adrenal Disease** ...................................................................................................................................................... 3  
   Kenneth B. Calder and Bruce R. Smoller

2. **Pancreas Disease and Diabetes Mellitus** .................................................................................................................. 11  
   Franco Rongioletti

3. **Thyroid Disease** ....................................................................................................................................................... 27  
   Alfredo Rebora and Franco Rongioletti

4. **Pituitary Gland Diseases** ........................................................................................................................................... 35  
   Martina Montinari and Franco Rongioletti

5. **Parathyroid Disease** .................................................................................................................................................... 43  
   Yann Charli-Joseph and Marcela Saeb-Lima

### Part II Cutaneous Metabolic Disease

6. **Dyslipidemia (Hyperlipidemia)** .............................................................................................................................. 55  
   Terrence Katona and Bruce R. Smoller

7. **Gout** .......................................................................................................................................................................... 63  
   Uma Sundram

8. **Lipomatosis** ............................................................................................................................................................... 69  
   Uma Sundram

9. **Obesity** ...................................................................................................................................................................... 75  
   Jessica Linder, Amena Usmani, Maria Miteva, Camillo Ricordi, and Paolo Romanelli
Contents

10 Porphyrias ................................................................................................................ 83
   Jaqueline M. Junkins-Hopkins

11 Hemochromatosis .................................................................................................... 91
   Aurora Parodi and Franco Rongioletti

12 Metabolic Syndrome in Psoriasis ........................................................................... 95
   Paolo Gisondi and Giampiero Girolomoni

Part III  Cutaneous Nutritional Disease

13 Acquired Nutritional Deficiencies ....................................................................... 101
   Martina Montinari, Aurora Parodi, and Franco Rongioletti

14 Anorexia Nervosa .................................................................................................... 109
   Jameel Ahmad Brown and Bruce R. Smoller

15 Alcohol Abuse ........................................................................................................ 115
   Torello Lotti and Angelo Massimiliano D’Erme

16 Glucagonoma Syndrome and Necrolytic Migratory Erythema ....................... 121
   Franco Rongioletti

Part IV  Cutaneous Deposition Disease

17 Amyloidoses ............................................................................................................ 127
   Franco Rongioletti

18 Mucinoses ................................................................................................................ 139
   Franco Rongioletti

19 Lipoid Proteinosis ................................................................................................... 153
   Franco Rongioletti

20 Colloid Milium .......................................................................................................... 157
   Franco Rongioletti

21 Calcification and Ossification ............................................................................... 161
   Maxime Battistella and Bernard Cribier

22 Pigmentary Deposition Disorders ....................................................................... 171
   Jessica Linder, Maria Miteva, and Paolo Romanelli

23 Exogenous Cutaneous Deposits with Special Consideration
to Skin Reactions to Soft-Tissue Fillers ................................................................. 181
   Franco Rongioletti

Index ................................................................................................................................. 191
Contributors

Maxime Battistella, M.D.
Cutaneous Pathology, Department of Pathology, APHP Hôpital Saint Louis, Paris, France

Jameel Ahmad Brown, M.D.
University of Arkansas for Medical Sciences, Little Rock, AR, USA
JABrown@uams.edu

Kenneth B. Calder, M.D.
Department of Pathology and Cell Biology, University of South Florida, Tampa, FL, USA
kbcalder@uams.edu

Bernard Cribier, M.D.
Clinique Dermatologique, Université de Strasbourg/Faculté de Médecine, Hôpitaux Universitaires de Strasbourg, Strasbourg, France
bernard.cribier@chru-strasbourg.fr

Angelo Massimiliano, D’Erme, M.D.
Department of Dermatological Sciences, University of Florence, Florence, Italy

Giampiero Girolomoni, M.D.
Department of Medicine, Section of Dermatology and Venereology, University of Verona, Verona, Italy
giampiero.girolomoni@univr.it

Paolo Gisondi, M.D.
Department of Biomedical and Surgical Science, Section of Dermatology and Venereology, University of Verona, Verona, Italy

Yann Charli-Joseph, M.D.
Instituto Nacional de Ciencias Médicas y Nutrición “Salvador Zubirán”, México City, México

Jaqueline M. Junkins-Hopkins, M.D.
Division of Dermatopathology and Oral Pathology, Department of Dermatology, Johns Hopkins Hospital, Baltimore, MD, USA
jjunkin1@jhmi.edu

Terrence Katona and Bruce R. Smoller
Richfield Laboratory of Dermatopathology, 9844 Redhill Drive, Cincinnati, OH 45242, USA
katonter@gmail.com

Jessica Linder, M.D.
Department of Dermatology, Miller School of Medicine, University of Miami, Miami, FL, USA

Torello Lotti, and Angelo Massimiliano D’Erme
Department of Dermatological Sciences, University of Florence, Via Lorenzo il Magnifico, 104, 50129 Florence, Italy
torello.lotti@unifi.it
Maria Miteva, M.D.
Department of Dermatology, Miller School of Medicine, University of Miami, Miami, FL, USA

Martina Montinari, M.D.
Section of Dermatology, University of Genoa, Genova, Italy
martimontinari@libero.it

Aurora Parodi, M.D.
Section of Dermatology, DISEM, University of Genoa, Genova, Italy
aurora.parodi@unige.it

Alfredo Rebora, M.D.
Section of Dermatology, University of Genoa, Genova, Italy
rebdermo@unige.it

Camillo Ricordi, M.D.
Miller School of Medicine, Diabetes Research Institute, University of Miami, Miami, FL, USA

Paolo Romanelli, M.D.
Department of Dermatology, Miller School of Medicine, University of Miami, Miami, FL, USA
promanelli@med.miami.edu

Franco Rongioletti, M.D.
Department of Endocrinological and Medical Sciences (DISEM), Section of Dermatology and Department of Pathology, University of Genova, Genova, Italy
franco.rongioletti@unige.it

Marcela Saeb-Lima, M.D.
Pathology Department, Instituto Nacional de Ciencias Médicas y Nutrición “Salvador Zubirán”, México City, México
marcela.saeblima@gmail.com

Bruce R. Smoller, M.D.
Department of Pathology, University of Arkansas for Medical Sciences, Little Rock, AR, USA
smollerbrucer@uams.edu

Uma Sundram, M.D, Ph.D.
Stanford University School of Medicine, Stanford, CA, USA
sundram@stanford.edu

Amena Usmani, M.D.
Department of Dermatology, Miller School of Medicine, University of Miami, Miami, FL, USA