Maria Claudia Almeida Issa Bhertha Tamura *Editors* 

# Chemical and Physical Procedures



### Clinical Approaches and Procedures in Cosmetic Dermatology

#### **Series Editors**

Maria Claudia Almeida Issa Department of Clinical Medicine – Dermatology Fluminense Federal University Niterói, RJ, Brazil

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Sorocaba's Ambulatório de Especialidade in Sorocaba São Paulo, SP, Brazil The series "Clinical Approach and Procedures in Cosmetic Dermatology" intends to be a practical guide in Cosmetic Dermatology. Procedures in cosmetic dermatology are very popular and useful in medicine, indicated to complement topical and oral treatments not only for photodamaged skin but also for other dermatosis such as acne, rosacea, scars, etc. Also, full-face treatments using peelings, lasers, fillers and toxins are increasingly being used, successfully substituting or postponing the need for plastic surgeries. Altogether, these techniques not only provide immediate results but also help patients to sustain long-term benefits, both preventing/treating dermatological diseases and maintaining a healthy and youthful skin. Throughout this series, different treatments in Cosmetic Dermatology will be discussed in detail covering the use of many pharmacological groups of cosmeceuticals, the new advances in nutraceuticals and emerging technologies and procedures.

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With 165 Figures and 23 Tables



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#### **Foreword**

When I received the invitation from Maria Claudia Issa, M.D., Ph.D., and Bhertha Tamura, M.D., Ph.D., to write one of the chapters of this marvelous book, I was very happy. Later, upon receiving the mission to write the prologue of this book, whose editors, with numerous publications in the international scientific field of cosmetic dermatology, dignify the Brazilian dermatology, left me extremely honored. In this book, some of the leading medical doctors and research scientists from Brazil and from all over the world present their professional experience in the cosmetic dermatology area.

Cosmetic dermatology is constantly evolving. Procedures for rejuvenating the skin are actively sought by people, nowadays. As dermatology grows as a specialty, an increasing proportion of dermatologists will become proficient in the delivery of different procedures. Even those who do not perform cosmetic procedures must be well versed in the details to be able to guide their patients.

Numerous major advances in the field of the cosmetic dermatology area, including botulinum exotoxin, soft tissue augmentation, chemical peels, cutaneous lasers, light source—based procedures, and the state of the art of dermatologic and cosmetic prescriptions, have been developed and enhanced by dermatologists and plastic surgeons.

Cryotherapy and electrosurgery are routinely used to remove unaesthetic lesions, contributing with skin rejuvenation. Peelings are still a very important tool in the armamentarium of the dermatology. Very interesting results in the treatment of photoaging can be obtained with relatively low cost. However, accuracy in its management as well as the knowledge of possible complications and their management are of extreme importance. In this volume, the different types of peelings are thoroughly scattered as well as innovations in this well-established area.

The series Clinical Approach and Procedures in Cosmetic Dermatology offers a wonderful and embracing text. It was a pleasure to contribute in this unique book with so many well-renowned authors.

This work project is a text certainly of inestimable value for those who wish to deepen their knowledge in the field of cosmetic dermatology.

Hoping that you will enjoy learning a lot from this book!

Mônica Manela Azulay

#### **Preface**

Nowadays, life expectation had increased and for a better quality of life, people are looking for beauty, aesthetics, and health. Dermatologists and plastic surgeons who work with cosmetic dermatology can help patients to maintain a healthy and youthful skin. Topical and oral treatments associated with full-face procedures using peelings, lasers, fillers, and toxins are increasingly being used, successfully substituting or postponing the need for plastic surgeries.

This series of book is very special among other ones already published as it encompasses all subjects related to this area of dermatology. All authors are experts in the field of cosmetic dermatology. Literature review and its correlation with authors' experience is a differential feature of this work.

This work had been divided into four volumes due to the breadth of the subjects, which cover skin anatomy and histopathology, physiology, patient's approaches, common cosmetic dermatosis, topical and oral treatments, and cosmetic procedures.

In *Chemical and Physical Procedures*, Prof. Maria Issa, Prof. Bhertha Tamura, and collaborators provide the applicability and benefits of physical and chemical procedures in cosmetic dermatology. Here, the use of superficial, medium, and deep peelings; cryotherapy; and electrosurgery are discussed in detail. These procedures are commonly used to treat unaesthetic lesions, which cannot be treated with topical or oral approaches, offering a rejuvenated appearance. Indications, contraindications, complications, and its management are also reported.

The Clinical Approach and Procedures in Cosmetic Dermatology was prepared to be a guide in cosmetic dermatology. It can be considered a complete encyclopedia in the field of cosmetic dermatology and, for this reason, it is extremely useful for those who already work with cosmetic dermatology as well as for beginners in this field. This is a new reference work project, and we are delighted to have you on board.

Maria Claudia Almeida Issa Bhertha Tamura

#### Acknowledgments

When we were invited to write a book about cosmetic dermatology, we could not imagine the dimension of this work project.

After drawing the program content, we realized that a comprehensive handbook series in this field would be built. Nevertheless, it would not be possible without the efforts and experience of our invited partners. They deserve our acknowledgment and our deep appreciation.

To all collaborators, our very special thanks.

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#### **About the Editors**



Maria Claudia Almeida Issa is among the leading dermatologists in Brazil and Latin America, especially in what regards to cosmetic dermatology. Dr. Issa holds a Ph.D. in Dermatology from the Federal University of Rio de Janeiro (2008) and an M.Sc. in Dermatology from the Fluminense Federal University (1997). Dr. Issa is currently an Associate Professor within the Department of Clinical Medicine – Dermatology, at the Fluminense Federal University, Brazil. Her research focuses on photodynamic therapy, non-melanoma skin cancer, lasers, photoaging, and dermal remodeling. Finally, Dr. Issa has an extensive clinical experience in cosmetic dermatology, being registered as a dermatologist at the Brazilian Society of Dermatology since 1995 and member of the American Academy of Dermatology.

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Part I

**Superficial, Medium, and Deep Peels**