

**Polycystic Ovary Syndrome
Novel Insights into Causes and Therapy**

Frontiers of Hormone Research

Vol. 40

Series Editor

Ashley B. Grossman Oxford

Polycystic Ovary Syndrome

Novel Insights into Causes and Therapy

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11 figures, 3 in color, and 10 tables, 2013

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Library of Congress Cataloging-in-Publication Data

Polycystic ovary syndrome: novel insights into causes and therapy / volume editors,

Djuro Macut ... [et al.].

p. ; cm. -- (Frontiers of hormone research, ISSN 0301-3073; v. 40)

Includes bibliographical references and indexes.

ISBN 978-3-318-02238-4 (hard cover: alk. paper) -- ISBN 978-3-318-02239-1 (electronic version)

I. Macut, Djuro. II. Series: Frontiers of hormone research; v. 40. 0301-3073

[DNLN: 1. Polycystic Ovary Syndrome--etiology. 2. Metabolic Syndrome X--complications.

3. Polycystic Ovary Syndrome--therapy. W1 FR946F v.40 2013 / WP 320]

618.1'1--dc23

2012033313

Bibliographic Indices. This publication is listed in bibliographic services, including Current Contents® and PubMed/MEDLINE.

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www.karger.com

Printed in Switzerland on acid-free and non-aging paper (ISO 9706) by Reinhardt Druck, Basel

ISSN 0301-3073

e-ISSN 1662-3762

ISBN 978-3-318-02238-4

e-ISSN 978-3-318-02239-1

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Foreword

Polycystic ovarian disease is a worldwide disorder which is seen in all populations and ethnic groups, although its manifestations may vary according to ethnicity. Such patients may present with irregular menses, hirsuties, acne or other signs of androgen excess, or sometimes infertility. Unfortunately, this common and distressing condition is often either ignored or dismissed by many clinicians as essentially 'cosmetic', and indeed often its manifestations may be mild and of little consequence. However, in many women it causes considerable concern and distress, and the hirsuties in particular can cause dramatic concern with regard to body image and feelings of femininity and attractiveness. Furthermore, there is now increasing evidence that there are long-term implications of polycystic ovarian disease over and beyond any short-term cosmetic concerns: the development of type 2 diabetes and the metabolic syndrome are clearly of major significance. But why is this condition so common, especially as it may compromise reproductive fitness in the reproductive years? Are there important genetic aspects, how can we best manage these patients, how is it related to the later development of the metabolic syndrome, and what are the optimal therapies currently and on the horizon? It should also be remembered that the condition is sometimes a secondary phenomenon to other disease states. These are the questions which Marija Pfeifer and her colleagues have addressed in this important volume based on a symposium held in 2012, where an international panel of experts gathered to try and make sense of the increasing data amassed over the past few years. We hope that by bringing together these contributions from such an international array of clinicians and scientists we can make such current knowledge available to all that may come across and treat this fascinating condition, and optimize the treatment for each and every patient.

Ashley B. Grossman, Oxford

Preface

The most frequent disorder affecting women of reproductive age is polycystic ovary syndrome (PCOS). PCOS has long been a field surrounded by considerable uncertainty as regards its etiology and pathogenesis, identification of its manifestations within the various disciplines of medicine, as well concerning the decision as to optimal treatment modalities. In the early years, the understanding of this syndrome was based on recognizing its clinical appearance in the presence of ovarian morphology. However, recently substantial advances have been made in knowledge pertaining to the complex genetic, biochemical, metabolic, cardiovascular, and reproductive issues associated with PCOS, with the result that today an integrative approach is being established in the understanding and management of the syndrome.

Insight into the specific endocrine and metabolic causes and consequences still remains the clinical cornerstone for full understanding of the syndrome and for further future development. Such advancement of our knowledge is absolutely essential since, in the absence of better therapeutic options to resolve its key metabolic and biochemical derangements, women with PCOS have for long been faced with the same problems and prospects as the majority of patients suffering from obesity and metabolic syndrome. Meanwhile, since the acronym PCOS still points to the ovary as the most prominent marker of the syndrome, the time may have come for general reappraisal of the syndrome – and its naming! – so as to adopt a far more global approach to its confrontation and more metabolic-oriented methods for its resolution.

This book presents a broad overview of recent developments in identifying the phenotypic expression of women with PCOS, this having been greatly clarified via recent clinical efforts to specifically define the syndrome, resulting in a completely new recognition of its phenotypic variability. The various parts of the volume are devoted to acquainting the reader with the metabolic and cardiovascular consequences of the syndrome, advances made in dealing with secondary forms of PCOS-like syndromes, as well as specific therapies of clinical symptoms and signs and the outcomes of these therapies. Additionally incorporated are a number of ‘hot topics’ related to genetic developments, endothelial causes leading to the unfavorable outcomes, and novelties in therapeutic approaches oriented to better resolution of metabolic and reproductive consequences.

The multiple aspects of the PCOS have been addressed in this comprehensive work by leading experts in the field and their teams. This reflects the editors' intention not only to assemble a volume for the reader's easy access to specifics regarding the characteristics and consequences of this syndrome, but also to offer a substantial body of critical scientific knowledge, this divided into twelve chapters. Thanks to the invaluable contributions of the authors, the present work succeeds in proposing a contemporary endocrine overview on PCOS, and we hope with a distinctive European flavor.

We would like to sincerely thank the authors for their expert submissions and their highly constructive contributions throughout the compilation of the book. We also take this opportunity to gratefully acknowledge the noble endeavors of the leading experts to develop European endocrine study groups on PCOS that focus not only on reproductive endocrine issues per se but also on the ongoing effort for integration of endocrinology with related fields of medicine.

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