A Case-Based Guide to Clinical Endocrinology

Second Edition

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ISBN 978-1-4939-2058-7 ISBN 978-1-4939-2059-4 (eBook)
DOI 10.1007/978-1-4939-2059-4
Springer New York Heidelberg Dordrecht London

Library of Congress Control Number: 2015930737

Printed on acid-free paper

Springer is part of Springer Science+Business Media (www.springer.com)

Preface

Where I come from in the North of England, a "second" refers to a piece of china with a fault in the decoration or a chip before entering the furnace. Buying "seconds" of very expensive china at low prices was, and is, a common practice of my middle class upbringing. So the term "second edition" does not do this volume justice in my own mind and it is unlikely to be gotten at a rock bottom price. I prefer to call it another volume. Of course there are a few reasons for another volume of Endocrinology Case Histories, but the most obvious is the fact that the earlier volume has created a demand. There was, at least to me, a surprisingly warm reception to the earlier case histories, and this was particularly evident in the download history. People still read a few paper books but the number reading digital versions is clearly exploding. One reason is the easy availability on an international scale. Another is that case histories are perfect for short commutes and the need for a quick revision. And let's not forget that the quality matters also. Having able and dedicated authors willing to submit their teaching cases and then holding their patience during the still long production period is the essential component of this book. I thank them all; many doing this a second time. The demands on medical practitioners continue to increase with no sign of relief and so our free time has become less and less and so has the willingness of many to contribute to such collections. This is a great shame because the multiplicity of authors makes for splendid reading; you never know what style is next and how the case will be revealed. I want to thank the Springer team, especially Richard Lansing and Maria Smilios, for encouraging the production of this collection. There is a lot of good and modern medicine to be learned here.

New York, NY, USA

Terry F. Davies

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Part I
Pituitary

Chapter 1
Introduction

Maria Fleseriu

Secretory Pituitary Adenomas

Pituitary adenomas can cause symptoms by hormonal hypersecretion. Hypersecretion of prolactin (PRL) is responsible for amenorrhea–galactorrhea in women and decreased libido in men, growth hormone (GH) for acromegaly, adrenocorticotropic hormone (ACTH) for Cushing's disease, and thyroid-stimulating hormone (TSH) for hyperthyroidism. Tumor mass-related effects such as headaches, visual field abnormalities, and depression of hormonal secretion (hypopituitarism) may also be present.

All patients who present with a pituitary tumor should be evaluated for gonadal, thyroid, and adrenal function as well as an assessment of PRL and GH. To detect the cause of hypersecretion and response to treatment, specific pituitary hormone stimulation and suppression tests are performed, in selected cases. To determine the presence, size and extent of the lesion magnetic resonance (MR) imaging (unless contraindicated) is the gold standard.

Pituitary tumor classification is based on cell cytoplasm staining properties as viewed by light microscopy and immunocytochemistry. Silent functioning adenomas (clinically nonfunctioning adenomas) also exhibit positive pituitary cell-type immunostaining. Most commonly, these include silent gonadotroph adenomas, silent corticotroph adenomas, and silent somatotroph adenomas.

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T.F. Davies (ed.), *A Case-Based Guide to Clinical Endocrinology*,
DOI 10.1007/978-1-4939-2059-4_1