Health and Treatment Strategies in Obesity
Health and Treatment Strategies in Obesity

Volume Editor

Varsha Vaidya  Baltimore, Md.

5 figures and 10 tables, 2006
Advances in Psychosomatic Medicine

Founded 1960 by
F. Deutsch (Cambridge, Mass.)
A. Jores (Hamburg)
B. Stockvis (Leiden)

Continued 1972–1982 by
F. Reichsman (Brooklyn, N.Y.)

Library of Congress Cataloging-in-Publication Data
Health and treatment strategies in obesity / volume editor, Varsha Vaidya. p. ; cm. – (Advances in psychosomatic medicine, ISSN 0065-3268 ; vol. 27)
Includes bibliographical references and index.
RC628.H414 2006 616.3’9806–dc22
2005033509

Bibliographic Indices. This publication is listed in bibliographic services, including Current Contents® and Index Medicus.

Disclaimer. The statements, options and data contained in this publication are solely those of the individual authors and contributors and not of the publisher and the editor(s). The appearance of advertisements in the book is not a warranty, endorsement, or approval of the products or services advertised or of their effectiveness, quality or safety. The publisher and the editor(s) disclaim responsibility for any injury to persons or property resulting from any ideas, methods, instructions or products referred to in the content or advertisements.

Drug Dosage. The authors and the publisher have exerted every effort to ensure that drug selection and dosage set forth in this text are in accord with current recommendations and practice at the time of publication. However, in view of ongoing research, changes in government regulations, and the constant flow of information relating to drug therapy and drug reactions, the reader is urged to check the package insert for each drug for any change in indications and dosage and for added warnings and precautions. This is particularly important when the recommended agent is a new and/or infrequently employed drug.

All rights reserved. No part of this publication may be translated into other languages, reproduced or utilized in any form or by any means electronic or mechanical, including photocopying, recording, microcopying, or by any information storage and retrieval system, without permission in writing from the publisher.

© Copyright 2006 by S. Karger AG, P.O. Box, CH–4009 Basel (Switzerland)
www.karger.com
Printed in Switzerland on acid-free paper by Reinhardt Druck, Basel
ISSN 0065–3268
Contents

VII Preface

1 Recent Advances in Obesity: Adiposity Signaling and Fat Metabolism in Energy Homeostasis
   Aja, S.; Moran, T.H. (Baltimore, Md.)

24 Current Nutritional Treatments of Obesity
   Greenwald, A. (Baltimore, Md.)

42 Pharmacologic Treatment of Obesity
   Sidhaye, A.; Cheskin, L.J. (Baltimore, Md.)

53 Bariatric Surgery
   Schweitzer, M.; Lidor, A.; Magnuson, T. (Baltimore, Md.)

61 Body Contouring following Massive Weight Loss Resulting from Bariatric Surgery
   Chandawarkar, R.Y. (Farmington, Conn.)

73 Psychosocial Aspects of Obesity
   Vaidya, V. (Baltimore, Md.)

86 Cognitive Behavior Therapy of Binge Eating Disorder
   Vaidya, V. (Baltimore, Md.)

94 Subject Index
Preface

The explosion of obesity with its multiple comorbidities and devastating effects on all aspects of an individual’s life has brought it to our attention. The increasing number of adolescents affected by obesity as well as the ‘global’ surge of obesity has led to greater interest and newer more effective treatments. The developed countries have a greater prevalence of obesity. While our genetic pool seems to have remained relatively the same over the ages, our environment has changed rapidly. We seem to be consuming more foods that are high in caloric value, while our energy expenditure has lessened by the use of machines that reduce the intensity of labor. The increasing prevalence of obesity in the USA and its medical, social, psychological and economic implications has made it a national health crisis. Obesity has been predicted to be the number one health problem globally by the year 2025 with the USA leading the way. Obesity is thought to be overtaking cigarette smoking to soon become the leading cause of death in the USA.

When compared to other serious health issues like HIV and lung cancer, the funding for obesity research does not match the threat it poses. However, great strides have been made in recent years to discover the cause of obesity as well as successful treatments for it. The discovery of neuropeptides as well as hormones regulating energy metabolism have led to a better understanding of the development of obesity. This has helped open doors to procure possible treatments, the end result hoped for being a medication that affects energy metabolism with effective and long-term weight loss without dangerous side effects. While the perfect drug to cure obesity has eluded us just yet, it does seem to be around the corner. Currently, the most effective treatment for obesity and its comorbidities in selected patients is bariatric surgery.
This volume reviews the strides we have made in our understanding of obesity with a special focus on bariatric surgery. Several nutritional strategies and diets are discussed, with a special section on dietary changes after bariatric surgery.

We have reviewed the most current understanding of the pathophysiology of energy metabolism. While bariatric surgery does produce long-lasting results, patient selection is important, as postoperative compliance is essential for a successful outcome. The prevalence of psychiatric illness in the obese is similar to those with normal weight; however, obese patients seeking treatment have an increased prevalence of psychiatric illness, most commonly major depression. Psychiatric illness is not a contraindication for bariatric surgery; however, it is important that the patient be mentally stable and engaged in treatment to ensure postoperative compliance and optimal outcome. Body image and sexual functioning are closely intertwined with obesity. Due to the rapid weight loss which occurs after bariatric surgery, these aspects need to be assessed pre- and postoperatively to ensure that the patient receives appropriate help to optimize the surgical outcome. Body contouring surgery is helpful in bariatric surgery patients that have massive weight loss. This helps patients improve mobility as well as body image self-esteem as discussed in the chapter by Rajiv Y. Chandawarkar. Binge eating disorder is being recognized as a frequent comorbid condition in the obese. While these patients are effectively treated in the initial 18 months after bariatric surgery, they become ‘grazers’ a year and a half after the surgery and can regain their weight. This volume deals specifically with cognitive behavioral therapy and interpersonal therapy for binge eating disorder that help sustain the benefits of bariatric surgery over a longer term and give the patient alternate coping skills.

The manifold effects that bariatric surgery has on the patient’s health, physical as well as psychological, make it the most effective treatment of obesity and its infiltrative effects on all aspects of the patient’s life. Until we discover the ‘perfect pill’ to overcome morbid obesity, bariatric surgery seems to be the most effective treatment in selected patients.

Varsha Vaidya