Contents

Part I  PCOS Epidemiology and Diagnosis

1 Diagnostic Criteria and Epidemiology of PCOS ........................................ 3
   Heather R. Burks and Robert A. Wild

2 Polycystic Ovarian Syndrome: A Diagnosis of Exclusion .................. 11
   Jennifer Wolf, Courtney L. Barnes, and Mira Aubuchon

Part II  Pathophysiology of PCOS

3 Recent Advances in the Genetics of Polycystic Ovary Syndrome
   .............................................................................................................. 29
   Michelle R. Jones, Ning Xu, and Mark O. Goodarzi

4 Ovarian Dysfunction in Polycystic Ovary Syndrome ....................... 53
   Helen D. Mason, Nafi Dilaver, and Suman Rice

5 The Role of the Adrenal Glands in the Hyperandrogenism
   Associated with Polycystic Ovarian Syndrome ................................. 71
   Ruth Freeman

6 The Hypothalamic–Pituitary Axis in PCOS ...................................... 81
   Sabrina Gill and Janet E. Hall

7 Insulin Resistance and Lipotoxicity in PCOS:
   Causes and Consequences ................................................................. 95
   Sylvain Bellanger, Marie-Claude Battista, and Jean-Patrice Baillargeon

8 Obesity, Metabolic Dysfunction, and Inflammation
   in Polycystic Ovary Syndrome ......................................................... 117
   Mira Aubuchon, Jennifer A. Bickhaus, and Frank González
Part III Managing PCOS

9 Role of Lifestyle and Diet in the Management of Polycystic Ovarian Syndrome .................................................. 147
Amy Krystock

10 Role of Insulin-Sensitizing Drugs in PCOS Management ............... 165
Johnny T. Awwad and Ghina Ghazeeri

11 Role of Statins in PCOS Management ........................................ 181
Israel Ortega and Antoni J. Duleba

12 Managing PCOS-Related Infertility: Ovulation Induction, In Vitro Fertilization, and In Vitro Maturation ......................... 205
Saioa Torrealday and Pasquale Patrizio

13 Managing the PCOS-Related Symptoms of Hirsutism, Acne, and Hair Loss ................................................................. 223
Beth McAvey and Harry Lieman

Part IV Unique Considerations in PCOS

14 PCOS in Adolescence: Diagnostic Dilemmas and Management Considerations ................................................................. 245
Tania S. Burgert

15 Considerations and Challenges for Pregnancy in Polycystic Ovary Syndrome .............................................................. 265
Christina Shih-chi Han and Erika F. Werner

Part V Role of Surgery in PCOS Management

16 Role of Surgery in the Management of PCOS: Rationale and Considerations for Bariatric Surgery ..................................... 277
Héctor F. Escobar-Morreale

17 Surgical Management of Polycystic Ovary Syndrome: A Contemporary Viewpoint on Place of Ovarian Surgery in PCOS Management ................................................................. 289
Phoebe H. Leonard, Jani R. Jensen, and Gaurang S. Daftary

Part VI Recognized Risks and Emerging Concepts

18 Long-Term Morbidity: Cardiovascular Disease, Cancer, and Depression in PCOS ............................................................ 303
Lauren W. Milman and Anuja Dokras
19 Emerging Concepts: Role of Vitamin D Deficiency in the Pathogenesis of PCOS
Sanam Lathief and Lubna Pal

Index