Contents

Part I  Etiology and Pathogenesis

1  Genetics of Inflammatory Bowel Diseases .................................................. 3
   Christopher J. Cardinale and Hakon Hakonarson

2  The Intestinal Immune System During Homeostasis
   and Inflammatory Bowel Disease ................................................................. 15
   David A. Hill and William A. Faubion Jr

3  Cytokines and Inflammatory Bowel Disease ............................................... 31
   Edwin F. de Zoeten and Ivan J. Fuss

4  The Gut Microbiota and Inflammatory Bowel Disease ............................... 45
   Máire A. Conrad, Gary D. Wu, and Judith R. Kelsen

5  Immune Dysregulation Associated with Very Early-Onset
   Inflammatory Bowel Disease ........................................................................ 55
   Judith Kelsen and Kathleen Sullivan

Part II  Epidemiology and Clinical Features

6  Epidemiology of Pediatric Inflammatory Bowel Disease ............................ 71
   Shehzad A. Saeed and Subra Kugathasan

7  The Natural History of Crohn Disease in Children ...................................... 87
   Benjamin Sahn and James Markowitz

8  Natural History of Ulcerative Colitis in Children ......................................... 95
   Peter Townsend and Jeffrey S. Hyams

9  Natural History of Pediatric Indeterminate Colitis ...................................... 103
   Melissa A. Fernandes, Sofia Verstraete, and Melvin B. Heyman

10 Extraintestinal Manifestations of Pediatric Inflammatory Bowel Disease ...... 109
    Shervin Rabizadeh and Maria Oliva-Hemker

11 Liver Disease in Pediatric Inflammatory Bowel Disease ............................ 117
    Amanda Ricciuto and Binita M. Kamath

12 Growth Impairment in Pediatric Inflammatory Bowel Disease .................. 135
    Thomas D. Walters and Anne M. Griffiths

13 Inflammatory Bowel Diseases and Skeletal Health ..................................... 155
    Francisco Sylvester
Part III Diagnosis

16 The History and Physical Exam .................................................. 195
   Alka Goyal

17 Differential Diagnosis of Inflammatory Bowel Disease .............. 199
   Thierry Lamiroua and Rafael Enaud

18 Laboratory Evaluation of Inflammatory Bowel Disease .......... 211
   Jennifer Strople and Benjamin D. Gold

19 Fecal Biomarkers in Inflammatory Bowel Disease .................. 225
   Jennifer Damman and K.T. Park

20 Radiologic Evaluation of Pediatric Inflammatory Bowel Disease ...... 233
   Stephen M. Druhan and Benedict C. Nwomeh

21 Endoscopy and Inflammatory Bowel Disease ....................... 247
   Shishu Sharma, Krishnappa Venkatesh, and Mike Thomson

22 The Pathology of Chronic Inflammatory Bowel Disease .......... 273
   Pierre Russo

23 Video Capsule Endoscopy in Inflammatory Bowel Disease ........ 287
   Ernest G. Seidman, Che Yung Chao, and Ana Maria Sant’Anna

24 Bone Health in Pediatric Inflammatory Bowel Disease ........... 299
   Dale Lee and Edisio Semeao

Part IV Medical Therapy

25 5-Aminosalicylate Therapy ............................................... 317
   Michael Stephens and Michelle Gonzalez

26 Antibiotic Therapy ............................................................... 325
   Lindsey Albenberg, Howard Kader, and Adam Paul

27 Nutritional Management of Inflammatory Bowel Disease .......... 333
   Anthony R. Otley, Andrew S. Day, and Mary Zachos

28 Probiotic Therapy ................................................................. 357
   David R. Mack

29 Corticosteroids ................................................................. 369
   Charles M. Samson and Johanna C. Escher

30 6-Mercaptopurine Therapy .................................................. 375
   Carmen Cuffari

31 Methotrexate ................................................................. 383
   Joel R. Rosh
32 Infliximab Therapy for Pediatric Crohn Disease and Ulcerative Colitis  
Philip Minar, Dana MH. Dykes, Ana Catalina Arce-Clachar, and Shehzad A. Saeed  
33 Anti-TNF Biologic Therapies Other than Infliximab  
Calen A. Steiner, Emily P. Whitfield, Jeremy Adler, and Peter D.R. Higgins  
34 Therapeutic Drug Monitoring in Pediatric Inflammatory Bowel Disease  
Namita Singh and Marla C. Dubinsky  
35 New Non-anti-TNF-α Biological Therapies for the Treatment of Inflammatory Bowel Disease  
Farzana Rashid and Gary R. Lichtenstein  
36 Medical Treatment of Perianal Crohn’s Disease Fistulæ  
Mark T. Osterman and Gary R. Lichtenstein  
37 Treatment of Acute Severe Ulcerative Colitis  
Jess L. Kaplan and Harland S. Winter  
38 Dietary Therapies for Inflammatory Bowel Disease  
Ronen Stein and Robert N. Baldassano  
39 Complementary and Alternative Therapies  
Jennifer Panganiban, Jessi Erlichman, and Maria Mascarenhas  

Part V Surgical Considerations  
40 Management of Intra-abdominal Complications of Inflammatory Bowel Disease  
Elizbeth C. Maxwell, Peter Mattei, and Andrew B. Grossman  
41 Surgical Management of Crohn Disease in Children  
Daniel von Allmen  
42 Surgical Treatment of Ulcerative Colitis  
Peter Mattei  
43 Postoperative Surveillance and Management of Crohn’s Disease  
Arthur M. Barrie III and Miguel Regueiro  
44 Pouchitis After Ileal Pouch-Anal Anastomosis  
Jacob Kurowski, Marsha Kay, and Robert Wyllie  
45 Enteral Feeding Devices and Ostomies  
Judith J. Stellar  

Part VI Research  
46 Clinical Indices for Pediatric Inflammatory Bowel Disease Research  
Dan Turner and Oren Ledder  
47 Clinical Trials (Clinical Perspective)  
Salvatore Cucchiara and Marina Aloi  
48 Clinical Trials (Industry/Regulatory Perspective)  
Tara Altepeter, Kurt Brown, Aisha Peterson Johnson, and Andrew E. Mulberg
<table>
<thead>
<tr>
<th>Chapter</th>
<th>Title</th>
<th>Author(s)</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>49</td>
<td>Infectious Complications of Pediatric Inflammatory Bowel Disease</td>
<td>Monica I. Ardura and Sandra C. Kim</td>
<td>605</td>
</tr>
<tr>
<td>50</td>
<td>Psychological Aspects of Inflammatory Bowel Disease in Children and Adolescents</td>
<td>Bonney Reed-Knight, Laura M. Mackner, and Wallace V. Crandall</td>
<td>615</td>
</tr>
<tr>
<td>51</td>
<td>Measurement of Quality of Life in Pediatric Inflammatory Bowel Disease</td>
<td>Amy Grant and Anthony Otley</td>
<td>625</td>
</tr>
<tr>
<td>52</td>
<td>Irritable Bowel Syndrome and Functional GI Disorders in Inflammatory Bowel Disease</td>
<td>Khalil I. El-Chammas and Manu R. Sood</td>
<td>639</td>
</tr>
<tr>
<td>53</td>
<td>Inflammatory Bowel Disease in Pregnancy</td>
<td>Sunanda Kane</td>
<td>651</td>
</tr>
<tr>
<td>54</td>
<td>Immunizations in the Child with Inflammatory Bowel Disease</td>
<td>Athos Bousvaros and Ying Lu</td>
<td>663</td>
</tr>
<tr>
<td>55</td>
<td>Malignant Tumors Arising in Inflammatory Bowel Disease</td>
<td>Thomas A. Ullman and Rona Yaeger</td>
<td>669</td>
</tr>
<tr>
<td>56</td>
<td>Quality Improvement in Inflammatory Bowel Disease</td>
<td>Jeremy Adler, Richard B. Colletti, Wallace V. Crandall, and Peter A. Margolis</td>
<td>685</td>
</tr>
<tr>
<td>57</td>
<td>Fostering Self-Management and Patient Activation</td>
<td>David Alain Wohl and Justin Vandergrift</td>
<td>697</td>
</tr>
<tr>
<td>58</td>
<td>Advocacy for Pediatric Patients with IBD</td>
<td>Janis Arnold and Athos Bousvaros</td>
<td>703</td>
</tr>
<tr>
<td>59</td>
<td>Legislative Advocacy</td>
<td>Sarah Buchanan</td>
<td>715</td>
</tr>
<tr>
<td>60</td>
<td>Transition from Pediatric to Adult Care</td>
<td>Stacy A. Kahn and Sandra C. Kim</td>
<td>721</td>
</tr>
</tbody>
</table>

Index                                      | 731  |
Pediatric Inflammatory Bowel Disease
Mamula, P.; Grossman, A.B.; Baldassano, R.N.; Kelsen, J.R.; Markowitz, J.E. (Eds.)
2017, XXI, 754 p. 147 illus., 99 illus. in color., Hardcover
ISBN: 978-3-319-49213-1