

---

# 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

<b>14 Puberty and Pediatric-Onset Inflammatory Bowel Disease . . . . .</b>	<b>171</b>
Dianne Deplewski, Neera Gupta, and Barbara S. Kirschner	
<b>15 Classification of Inflammatory Bowel Disease in Children. . . . .</b>	<b>181</b>
Mary E. Sherlock and Eric I. Benchimol	

### **Part III Diagnosis**

<b>16 The History and Physical Exam . . . . .</b>	<b>195</b>
Alka Goyal	
<b>17 Differential Diagnosis of Inflammatory Bowel Disease . . . . .</b>	<b>199</b>
Thierry Lamireau and Raphael Enaud	
<b>18 Laboratory Evaluation of Inflammatory Bowel Disease. . . . .</b>	<b>211</b>
Jennifer Stroppe and Benjamin D. Gold	
<b>19 Fecal Biomarkers in Inflammatory Bowel Disease . . . . .</b>	<b>225</b>
Jennifer Damman and K.T. Park	
<b>20 Radiologic Evaluation of Pediatric Inflammatory Bowel Disease . . . . .</b>	<b>233</b>
Stephen M. Druhan and Benedict C. Nwomeh	
<b>21 Endoscopy and Inflammatory Bowel Disease . . . . .</b>	<b>247</b>
Shishu Sharma, Krishnappa Venkatesh, and Mike Thomson	
<b>22 The Pathology of Chronic Inflammatory Bowel Disease . . . . .</b>	<b>273</b>
Pierre Russo	
<b>23 Video Capsule Endoscopy in Inflammatory Bowel Disease . . . . .</b>	<b>287</b>
Ernest G. Seidman, Che Yung Chao, and Ana Maria Sant'Anna	
<b>24 Bone Health in Pediatric Inflammatory Bowel Disease . . . . .</b>	<b>299</b>
Dale Lee and Edisio Semeao	

### **Part IV Medical Therapy**

<b>25 5-Aminosalicylate Therapy . . . . .</b>	<b>317</b>
Michael Stephens and Michelle Gonzalez	
<b>26 Antibiotic Therapy . . . . .</b>	<b>325</b>
Lindsey Albenberg, Howard Kader, and Adam Paul	
<b>27 Nutritional Management of Inflammatory Bowel Disease . . . . .</b>	<b>333</b>
Anthony R. Otley, Andrew S. Day, and Mary Zachos	
<b>28 Probiotic Therapy . . . . .</b>	<b>357</b>
David R. Mack	
<b>29 Corticosteroids . . . . .</b>	<b>369</b>
Charles M. Samson and Johanna C. Escher	
<b>30 6-Mercaptopurine Therapy . . . . .</b>	<b>375</b>
Carmen Cuffari	
<b>31 Methotrexate . . . . .</b>	<b>383</b>
Joel R. Rosh	

<b>32</b>	<b>Infliximab Therapy for Pediatric Crohn Disease and Ulcerative Colitis . . . . .</b>	<b>389</b>
	Philip Minar, Dana MH. Dykes, Ana Catalina Arce-Clachar, and Shehzad A. Saeed	
<b>33</b>	<b>Anti-TNF Biologic Therapies Other than Infliximab . . . . .</b>	<b>401</b>
	Calen A. Steiner, Emily P. Whitfield, Jeremy Adler, and Peter D.R. Higgins	
<b>34</b>	<b>Therapeutic Drug Monitoring in Pediatric Inflammatory Bowel Disease . . . . .</b>	<b>417</b>
	Namita Singh and Marla C. Dubinsky	
<b>35</b>	<b>New Non-anti-TNF-<math>\alpha</math> Biological Therapies for the Treatment of Inflammatory Bowel Disease . . . . .</b>	<b>425</b>
	Farzana Rashid and Gary R. Lichtenstein	
<b>36</b>	<b>Medical Treatment of Perianal Crohn's Disease Fistulae . . . . .</b>	<b>451</b>
	Mark T. Osterman and Gary R. Lichtenstein	
<b>37</b>	<b>Treatment of Acute Severe Ulcerative Colitis . . . . .</b>	<b>465</b>
	Jess L. Kaplan and Harland S. Winter	
<b>38</b>	<b>Dietary Therapies for Inflammatory Bowel Disease . . . . .</b>	<b>473</b>
	Ronen Stein and Robert N. Baldassano	
<b>39</b>	<b>Complementary and Alternative Therapies . . . . .</b>	<b>485</b>
	Jennifer Panganiban, Jessi Erlichman, and Maria Mascarenhas	

## **Part V Surgical Considerations**

<b>40</b>	<b>Management of Intra-abdominal Complications of Inflammatory Bowel Disease . . . . .</b>	<b>497</b>
	Elizabeth C. Maxwell, Peter Mattei, and Andrew B. Grossman	
<b>41</b>	<b>Surgical Management of Crohn Disease in Children . . . . .</b>	<b>507</b>
	Daniel von Allmen	
<b>42</b>	<b>Surgical Treatment of Ulcerative Colitis . . . . .</b>	<b>519</b>
	Peter Mattei	
<b>43</b>	<b>Postoperative Surveillance and Management of Crohn's Disease . . . . .</b>	<b>533</b>
	Arthur M. Barrie III and Miguel Regueiro	
<b>44</b>	<b>Pouchitis After Ileal Pouch-Anal Anastomosis . . . . .</b>	<b>543</b>
	Jacob Kurowski, Marsha Kay, and Robert Wyllie	
<b>45</b>	<b>Enteral Feeding Devices and Ostomies . . . . .</b>	<b>557</b>
	Judith J. Stellar	

## **Part VI Research**

<b>46</b>	<b>Clinical Indices for Pediatric Inflammatory Bowel Disease Research . . . . .</b>	<b>571</b>
	Dan Turner and Oren Ledder	
<b>47</b>	<b>Clinical Trials (Clinical Perspective) . . . . .</b>	<b>591</b>
	Salvatore Cucchiara and Marina Aloï	
<b>48</b>	<b>Clinical Trials (Industry/Regulatory Perspective) . . . . .</b>	<b>593</b>
	Tara Altepeter, Kurt Brown, Aisha Peterson Johnson, and Andrew E. Mulberg	

## Part VII Special Considerations

<b>49 Infectious Complications of Pediatric Inflammatory Bowel Disease . . . . .</b>	<b>605</b>
Monica I. Ardura and Sandra C. Kim	
<b>50 Psychological Aspects of Inflammatory Bowel Disease in Children and Adolescents . . . . .</b>	<b>615</b>
Bonney Reed-Knight, Laura M. Mackner, and Wallace V. Crandall	
<b>51 Measurement of Quality of Life in Pediatric Inflammatory Bowel Disease . . . .</b>	<b>625</b>
Amy Grant and Anthony Otley	
<b>52 Irritable Bowel Syndrome and Functional GI Disorders in Inflammatory Bowel Disease . . . . .</b>	<b>639</b>
Khalil I. El-Chammas and Manu R. Sood	
<b>53 Inflammatory Bowel Disease in Pregnancy . . . . .</b>	<b>651</b>
Sunanda Kane	
<b>54 Immunizations in the Child with Inflammatory Bowel Disease . . . . .</b>	<b>663</b>
Athos Bousvaros and Ying Lu	
<b>55 Malignant Tumors Arising in Inflammatory Bowel Disease . . . . .</b>	<b>669</b>
Thomas A. Ullman and Rona Yaeger	
<b>56 Quality Improvement in Inflammatory Bowel Disease . . . . .</b>	<b>685</b>
Jeremy Adler, Richard B. Colletti, Wallace V. Crandall, and Peter A. Margolis	
<b>57 Fostering Self-Management and Patient Activation . . . . .</b>	<b>697</b>
David Alain Wohl and Justin Vandergrift	
<b>58 Advocacy for Pediatric Patients with IBD . . . . .</b>	<b>703</b>
Janis Arnold and Athos Bousvaros	
<b>59 Legislative Advocacy . . . . .</b>	<b>715</b>
Sarah Buchanan	
<b>60 Transition from Pediatric to Adult Care . . . . .</b>	<b>721</b>
Stacy A. Kahn and Sandra C. Kim	
<b>Index . . . . .</b>	<b>731</b>

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