GUEST EDITOR'S PREFACE

Pediatric Gastrointestinal Emergencies

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Gastrointestinal emergencies are important to clinicians and their patients. Some disease processes are extremely common, while others can be life threatening. Whereas acute gastroenteritis results in nearly 200 000 pediatric hospitalizations annually but very little mortality, other disease processes, such as major upper gastrointestinal hemorrhage and acute liver failure, are infrequent, yet can have dire consequences. Thus, the clinician has to identify the few true emergencies among a sea of patients presenting with more mundane gastrointestinal complaints. More importantly, emergency care providers need to be capable of minimizing morbidity in patients with non–life-threatening conditions while optimizing outcomes in patients with more significant disease processes.

New clinical data based on clinical trials, multinational research collaborative efforts, and expanding pediatric expertise mandate that clinicians stay abreast of recent developments. To improve the performance of the health care team, it must incorporate the latest studies, clinical algorithms, consensus statements, and expert opinion. Thus, in this edition, we have attempted to bring together experts from around the globe (North America, Israel, Australia) and from a variety of specialties (pediatric emergency medicine, pediatric gastroenterology, pediatric hepatology, pediatric otorhinolaryngology, pediatric trauma) to cover the broad array of gastrointestinal emergencies that can occur. We selected disease processes that are either very common (constipation, gastroenteritis) or uncommon yet life threatening (gastrointestinal hemorrhage, acute liver failure, penetrating abdominal trauma). The selected authors are practicing clinicians who are recognized authorities in their fields. Regardless of their background, the focus of the articles was on the bottom line: what do members of the emergency department team need to know to optimize the care of this patient?

Although we hope that this edition answered many clinical questions, as I began reviewing the articles written by our expert colleagues, I realized a few key realities. One—we have come a long way. We, as pediatric emergency medicine physicians, have changed the treatment patterns and beliefs of other subspecialists by studying these diseases from the emergency medicine perspective. Examples include the use of antiemetic agents in gastroenteritis, narcotics in children with acute abdominal pain, polyethylene glycol electrolyte solutions to children with chronic constipation, and nonoperative management in children with penetrating abdominal trauma.

Two—we have a long way to go. Although we have made huge strides in many domains, there are many realms of research that remain unexplored and for which evidence is desperately needed. A few examples include the role of focused assessment with sonography for trauma in penetrating trauma, nasogastric rehydration in dehydration, the optimal pain control regimens in pediatric renal or biliary colic, the ideal observation period in children who ingest coins, the role of urgent endoscopy in children with upper gastrointestinal hemorrhage, and the optimal method of managing constipation in the emergency department (eg, the role of enemas). Although some data are available to guide clinicians, much is based on either expert opinion or adult data. In this regard, however, it is reassuring to note

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that clinicians are coming together to form multinational collaborative efforts to answer these questions. For example, the Pediatric Acute Liver Failure Study Group includes investigators from 20 sites and 3 countries; and their mandate is simple yet crucial to improving the care of children: to collect, maintain, analyze, and report clinical, epidemiologic, and outcome data in children with acute liver failure. In addition, pediatric emergency medicine researchers have come together recently to form the Pediatric Emergency Research Network that includes research networks from Europe (Research in European Paediatric Emergency Medicine [REPEM]), Australia/New Zealand (Paediatric Research in Emergency Departments International Collaborative [PREDICT]), Canada (Pediatric Emergency Research Canada [PERC]) and the United States (Pediatric Emergency Care Applied Research Network [PECARN] and Pediatric Emergency Medicine Collaborative Research Committee [PEM CRC]).

Three—the benefits that will occur as we increasingly work with our colleagues in a multidisciplinary manner to improve the care of children. Regardless of the article that was included in this edition, it was clear that collaboration is a key to improving the outcomes of children. Examples include ensuring the prompt evaluation of children who may have inflammatory bowel disease (gastroenterologists), the administration of appropriate analgesia to children with abdominal pain (surgeons), and follow-up for children with constipation (pediatricians, gastroenterologists). We must also collaborate at a local level to ensure that pathways and protocols are in place that draw on local expertise to manage children in a timely, systematic, evidence-based, and efficient manner when they present with acute liver failure, hematemesis, and ingested foreign bodies.

I would like to thank all the authors who contributed to this effort and have made working on this project such a pleasure. Reviewing the articles was extremely educational and highlighted for me how much progress has been made in the treatment of pediatric gastrointestinal emergencies. I would like to thank Dr Steve Krug for giving me this opportunity and for all his mentorship through the years. Finally, I would like to thank my wife, Dr Jennifer Thull-Freedman, for all her guidance, support, intellectual contributions, and writing skills, without which nothing I write would ever get published.