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Commentary—Update on disorders of the gastrointestinal tract in children, part II

Children with gastrointestinal disorders are frequently seen by primary care clinicians on a day to day basis. This issue of *Current Problems in Pediatric and Adolescent Health Care* contains six articles that highlight the epidemiology, evaluation, and management of several important gastrointestinal disorders often followed by the primary care clinicians. The areas discussed in this issue are highly relevant and many practical updates are included that are very helpful for the primary care clinician.

Saeed¹ provides a comprehensive review of Acute Pancreatitis in Children: Updates in Epidemiology, Diagnosis and Management, highlights the increased incidence of the disease potentially due to improved awareness and access to specialists as well as diagnostic modalities. The article describes the classification of the disease based on severity, a useful departure from the adult Ranson et al.² criteria that predict the prognosis and mortality risk of acute pancreatitis, introduced in 1974 by the pancreatic specialist and surgeon, Dr. John Ranson. The new criteria set forth by the pediatric group INSPIRE (In Search for a Cure) consortium is a simple guideline³ for assessing the severity of acute pancreatitis in a pediatric patient. A recent article by Shahein et al. suggests that elevation of admission serum BUN, persistent tachycardia and fluid resuscitation requirement were associated with increase length of hospital stay and severity in pediatric acute pancreatitis. Fluid intake above recommended maintenance did not reduce length of stay.⁴ The article highlights the common etiologies of acute pancreatitis and Table 1 provides a comprehensive list. Pancreatitis may also be part of COVID-19.⁵

Yargerand Sandberg⁶ give a comprehensive update in diagnosis and management of chronic abdominal pain. The article begins by providing helpful definitions of the different terms used for functional abdominal pain and describes Rome IV criteria. The process of evaluating a child with chronic abdominal pain is well described with emphasis on a thorough history, which may be more helpful than elaborate diagnostic testing and can guide the clinician's management. Table 3 describes "red flag" symptoms; it is a quick helpful guide to clinicians. Treatment options are described in detail including the importance of family education and reassurance with acknowledgement of pharmacologic shortcomings. The role of psychology and when to refer to pediatric gastroenterology are also discussed. Recent systematic reviews describe usefulness of fiber⁷ in children with chronic abdominal pain and lack of evidence for pharmaceutical benefit⁸ supporting the discussion in this article that the efficacy of medication is limited.

The chronic diarrhea article written by Chu et al.⁹ pointed out that etiologies can range from a simple functional disorder such as toddler's diarrhea to a more significant illness such as inflammatory bowel disease. The astute clinician can distinguish organic from non-organic etiologies through detailed history and a careful clinical exam. Table 1 describes alarm features for organic disease. The special considerations section highlights the importance of age and other comorbidities in management. The article also describes variations in etiologies among countries. In the appropriate clinical setting, stool studies can be helpful to differentiate organic from non-organic etiology and calprotectin can be helpful in suspected cases of inflammatory bowel disease.¹⁰

Kelley and Muniyappa¹¹ discuss "Hyperbilirubinemia in Pediatrics: Evaluation and Care". The authors describe both conjugated and unconjugated hyperbilirubinemia and emphasize that direct hyperbilirubinemia is always pathologic and warrants prompt referral. The figures provided in this article are extremely helpful and include a nomogram for the designation of risk in infants with indirect hyperbilirubinemia based on infant's age in hours, management and follow up recommendations for hyperbilirubinemia, approach to diagnosis of conjugated and unconjugated hyperbilirubinemia, As a primary care clinician, it is helpful to know that there are specific disorders in children with conjugated hyperbilirubinemia that require immediate attention such as galactosemia, urinary tract infection and anterior hypopituitarism and others that are time sensitive such as

biliary atresia. Early detection of biliary atresia increases the probability of successful corrective surgery.¹²

Alexander and Mutyala¹³ write about “Understanding Gastrointestinal Motility Studies in Pediatrics”. They address a very complex specialty within the specialty and describe studies that are usually limited in availability to large tertiary pediatric referral centers. The article describes these sophisticated procedures in a simple yet comprehensive manner. Common presenting symptoms are seen regularly in any primary care office and include abdominal pain, vomiting, constipation, etc. and are worthy of referral if they become refractory to standard treatment approaches.

Last, but certainly not least, McNeice and Sandberg¹⁴ discuss another common disorder, with an “Update in Non-Alcoholic Fatty Liver”. The article describes ALT as a cost-effective and readily available test to screen for fatty liver in children at risk for developing NAFLD. Elastography is becoming an imaging modality that is gaining favor and is increasingly used in evaluating and monitoring hepatic fibrosis in children.¹⁵

In summary, disorders of the gastrointestinal system are common in children, and as a general pediatrician, I am often the first point of contact for children presenting with these disorders. The task of identifying the child with the organic or more serious disease out of the large number of children with non-organic or self-limiting illness can be daunting but consideration of a broad differential diagnosis and recognition of “red-flag” symptoms can be helpful. Recognition of when to refer to a pediatric gastroenterologist can optimize the care of these children. This gastrointestinal edition of *Current Problems in Pediatric and Adolescent Health Care* can be quite helpful in managing several important gastrointestinal disorders in children.

Declaration of Competing Interest

The author has no conflicts of interest to report.

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