Theme: Pediatric Gastroenterology

Very early-onset inflammatory bowel disease– NASPGHAN position paper
(*J Pediat Gastroent Nutr. 2020;70:389-403*)

In view of the increasing rate of pediatric inflammatory bowel disease (IBD) and increasing knowledge and experience with this condition, the NASPGHAN (North American Society for Pediatric Gastroenterology, Hepatology and Nutrition) has come out with a position paper on very early onset (VEO) IBD. It describes the epidemiology classification, genetic etiologies, phenotypes and treatment modalities for VEO-IBD. IBD diag-nosed in the first 2 years of life is called infantile-onset IBD while that diagnosed between 2 to 6 years is known as VEO-IBD. Monogenic defects can be detected in 15-20% of children with VEO-IBD. The genes involved are those of the intestinal epithelial barrier function and immunological disorders. Detailed phenotypic characterization including clinical evaluation, endoscopy and biopsies can help narrow down the plausible genetic defects, which can further be identified by targeted or whole exome sequencing. The current data on VEO-IBD is limited to case reports and small case series. The available treatment modalities include immunomodulators such as methotrexate and azathioprine, biologi-cals such as infliximab and abatacept. The child may also require surgical interventions or hematopoietic stem cell transplant. It is important to have a collaborative multidisciplinary team to manage these patients.

Monogenic pediatric inflammatory bowel disease
(*Gastroenterology. 2020;158:2208-20*)

It is estimated that more than a quarter of the cases of inflammatory bowel disease (IBD) develop during childhood or adolescence. The younger the age of onset of an illness, the more is the role of host genetics. The role of monogenic variants in IBD across the entire pediatric age range is unknown. This study was conducted at the Sick Kids IBD centre Toronto, Canada to evaluate the same. Whole exome sequencing of 1005 children with IBD was done. The authors identified 40 rare variants associated with 21 monogenic genes among 31 of the 1005 patients. The variants were identified in 7.8% of children younger than 6 years and 2.3% of the children between 6 to 18 years. Monogenic IBD was more likely to be seen if the age of onset was younger than 2 years or there was a family history of an autoimmune disease or if there were extraintestinal manifestations or surgery.

Chronic vomiting in children: Rumination syndrome an underdiagnosed and untreated etiology
(*Indian J Gastroenterol. 2020;39:196–203*)

This was a prospective study that enrolled 50 children aged 5-18 years presenting with chronic or recurrent vomiting of a minimum of two months duration. Clinical evaluation was done by a single investigator using a structured questionnaire. The first line of investigation included routine urine and blood tests, ultrasound abdomen, a fundus examination, an ultrasound and barium meal follow through. The second line investigations involved endoscopy with esophageal biopsies and gastric emptying scan. A diagnosis of rumination syndrome was made in 30 children followed by cyclical and functional vomiting in 8 and 6 children, respectively. Intestinal tuberculosis was diagnosed in 4 children. Children with rumination syndrome had a relapsing and remitting course in 40% and a chronically symptomatic course in 60% of the cases. It was seen that a diagnosis of rumination syndrome was often missed or delayed. The authors concluded that the diagnosis can often be made clinically, and diaphragmatic breathing is an effective treatment.

Ursodeoxycholic acid in infants with cholestasis – Increased morbidity and mortality
(*Medicine (Baltimore). 2020;99:e18730*)

Ursodeoxycholic acid is often used in the management of infants with cholestasis. This is an off label use. In this study from Egypt, a retrospective review was done of the data of 779 neonates and infants with cholestasis over a period of 10 years. The etiology was surgical in 19.5% cases, neonatal hepatitis in 67.2%, and paucity of intrahepatic bile ducts in 13.3%. Out of all the infants, 54.4% received UDCA (15-30 mg/kg/d), 45.6% did not. Both groups were matched with regards to the etiology and severity. Seventy three percent achieved a cure without UDCA as against only 45% of those on UDCA. Those on UDCA had significantly worse outcomes and more complications. The authors concluded that the use of UDCA was associated with serious morbidity and death which was preventable. They suggested that off-label use of UDCA in neonates and children should be utterly prohibited.

Predictors of non-alcoholic fatty liver disease (NAFLD) among children with obesity
(*J Pediatr Endocrinol Metab*. 2020;33:247-53)

The prevalence of childhood obesity is increasing all over the world. Non-alcoholic fatty liver disease (NAFLD) is a known complication of obesity at all ages. This study was done to determine the prevalence and predictors of NAFLD in obese children. Clinical and biochemical parameters were studied in the NAFLD and non-NAFLD group. Out of 33 obese children, 63.6% were found to have NAFLD. Mean values of anthropometric parameters such as BMI and waist circumference were higher in the NAFLD group, so were the, triglycerides and the alanine aminotransferase levels. Multivariate regression analysis revealed that triglycerides were an independent predictor of NAFLD.

Identification of risk factors must now lead to screening strategies for high-risk children, so that morbidity related to this chronic problem can be reduced.

Varuna Vyas
drvaruna.vyas@gmail.com