Editorial

Growth Parameters Early in the Course of Pediatric Inflammatory Bowel Disease

The incidence of inflammatory bowel disease (IBD) is increasing in different parts of the world.\(^1\) Etiology remains unclear and disease phenotypes and behaviors may differ across the different populations worldwide given the genetic and environmental heterogeneity. IBD affects mostly young individuals with one in four patients presenting in childhood, adolescence, and very young adulthood,\(^2\) particularly at a critical developmental stage that entails physical growth, bone density accrument, puberty progression, and emotional and social development. In essence, IBD can influence all of the above milestones with potential long-term consequences if the diagnosis and appropriate effective therapy are delayed. Even with the appropriate management, maximum growth potential may not always be reached.\(^3\) Current therapeutic goals emphasize a steroid sparing approach to achieve clinical remission and mucosal healing, restore growth and bone density, and support psychosocial development. Recognizing early signs and symptoms of IBD to warrant prompt referral to a pediatric gastroenterology specialist is important. One of the earliest signs of IBD is a change in linear growth,\(^4\) giving the general provider a valuable tool to raise concern early when detected.

In their paper published in this issue of Saudi Journal of Gastroenterology, El Mouzan et al. share some of the data available through the national Kingdom of Saudi Arabia database for children with IBD.\(^5\) This registry is a commendable effort that offers a wealth of data essential for examining what may well be unique IBD phenotypes and behaviors to the pediatric population in KSA and the region. IBD registries worldwide provide valuable population-specific insight and help improve patient care by monitoring disease patterns and effect of medical and nutritional treatment on the disease course.\(^6\)\(^,\)\(^7\)

The study assesses the linear growth parameters at the time of diagnosis of children with IBD in KSA. Such data are not commonly available in this part of the world. The study shows that in the cohort of 374 children with IBD age 4 months to 17 years, one out of four children show linear growth impairment (LGI) at diagnosis. LGI was defined as length or height for age ≤2 years standard deviation from the mean. The authors outline the dynamics of their choice to use the WHO published growth data: This allowed comparison to international data on LGI in IBD, yet did not provide a national population-specific comparison. The absence of national- or regional-specific growth data at the time of the study is recognized, as is the case in many countries. Nevertheless, the authors point out the higher incidence of LGI in their IBD patients at 26% than observed in Saudi preschool and school-age general population at 11%.\(^8\) The limitation of a static height or length measurement and its deviation from the population mean (in contrast to height-velocity tracking) is the influence of parental height and family growth trends. Understandably, growth velocity data across an extended timeline may often be unavailable. Other growth variables of interest are weight, weight/length, weight/height, and body mass index.

LGI was seen across the cohort with no statistically significant difference between genders or diseases subtype (Crohn’s vs UC), although numerically patients with CD were more likely to have LGI than UC. When the analyzing LGI in young (age <10 years per Paris classification)\(^9\) vs older patients, LGI was significantly more common in young children with CD and older children with UC. For the older children with UC, this contrasts the international experience indicating more growth concerns at diagnosis for Crohn’s disease than UC.\(^10\) This raises the question of whether pediatric CD phenotype at presentation in KSA is milder than in the west, or UC phenotype is more complicated, or if the diagnosis of CD is commonly made early and UC diagnosis made at an advanced stage. These interesting findings certainly merit further exploration.

Given what we learn, our partners in general pediatrics and family medicine should continue to carefully assess the child’s linear growth and consider LGI a concerning sign that warrants further workup and possibly referral for suspected IBD. This paper is hopefully one of many, further examining the wealth of data from the KSA pediatric IBD registry. We look forward to learning more about similarities and differences with regard to disease phenotype, behavior, and activity at diagnosis and with ongoing disease management across the different pediatric populations in the world.

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