Inflammatory bowel disease: Clinical screening and transition of care

Inflammatory bowel disease (IBD), a chronic immune-mediated disorder encompassing Crohn’s disease and ulcerative colitis, has the highest prevalence in North America and Europe. \(^\text{[1]}\) The incidence of IBD, however, has been increasing in low prevalence regions such as Asia and the Middle East. \(^\text{[2]}\) The Kingdom of Saudi Arabia (KSA) is one region where this pattern has been noted and described. \(^\text{[3-5]}\) The increase in incidence and prevalence of IBD in this region highlights the importance of early recognition and accurate diagnosis.

A delay in the diagnosis of Crohn’s disease has been associated with inferior outcomes such as the development of obstructive complications and need for surgery. \(^\text{[6]}\) Multiple factors can account for a delay in the diagnosis of Crohn’s disease. One of the most vital reasons is the symptom overlap with other etiologies such as irritable bowel syndrome (IBS). For example, the Crohn’s disease activity index (CDAI) (although not a diagnostic tool by design) was found to be similarly elevated in IBS and Crohn’s disease patients. \(^\text{[7]}\) Accordingly, there is a need for a clinical discriminatory tool to assist in the prediction of underlying Crohn’s disease in these patients.

The red flags index score (RFS) was recently developed as a clinical tool to predict early diagnosis of Crohn’s disease. \(^\text{[8]}\) The 8 variables included in the final score are: (1) Nonhealing or complex perianal fistula or abscess or perianal lesions (apart from hemorrhoids); (2) first-degree relative with confirmed IBD; (3) weight loss (5% of usual body weight) in the last 3 months; (4) chronic abdominal pain (>3 months); (5) nocturnal diarrhea; (6) mild fever in the last 3 months; (7) no abdominal pain 30–45 min after meals, predominantly after vegetables; (8) no rectal urgency. An RFS ≥8 was significantly associated with having Crohn’s disease compared to IBS and healthy controls with a sensitivity and specificity of 0.94 (95% CI: 0.88–0.99) and 0.94 (95% CI: 0.90–0.97), respectively, and an area under the curve of 0.97 (95% CI: 0.94–0.99). \(^\text{[8]}\)

In this issue of the journal, Mosli et al. assess the pattern of the RFS in a population of IBS patients. \(^\text{[9]}\) The authors prospectively surveyed 255 IBS patients at a general medicine clinic in KSA. The survey comprised 7 RFS questions (excluded rectal urgency). The main outcome was to assess the prevalence of an RFS >5 indicating the need for ileocolonoscopy. In this cohort, 54.9% of the patients had an RFS >5. On multivariate regression analysis, lack of evaluation by a gastroenterologist was a significant predictor of an RFS >5 (OR 2.2; 95% CI 1.3–3.7; \(P = 0.003\)). The authors conclude that a large portion of patients might be misdiagnosed with IBS and the lack of a gastroenterologist evaluation is associated with a high RFS. This is an intriguing study that evaluated the prevalence of an elevated RFS in a population of IBS patients.

Multiple limitations are important to note that have been addressed by the authors. For one, patients with an elevated RFS did not undergo objective evaluation such as an ileocolonoscopy or fecal calprotectin. Hence, the inference of misdiagnosis cannot be fully ascertained, even though the score performed well in the initial development phase. Another limitation is generalizability as this study was performed on a population from a tertiary referral center and may not apply to patients evaluated in community practice settings. Nevertheless, this study highlights the prevalence of red flag symptoms in IBS patients and the importance of referring such patients to a gastroenterologist.

A rise in the incidence of IBD has also been demonstrated in the pediatric population. Two recently published population studies in France and Finland documented an increase in the incidence of early-onset IBD. \(^\text{[10,11]}\) El Mouzan et al. described an increase in the incidence of pediatric IBD in KSA. \(^\text{[12]}\) In their study, they noted an incidence rate of pediatric IBD of 0.47 per 100,000 children per year in 2012 compared to 0.25 per 100,000 children per year in 2003. \(^\text{[12]}\) Eventually, this growth of the pediatric IBD population will culminate in an increase in the number of patients that will transition to adult IBD care. Successful transition of care from the pediatric to adult clinic is a vital step in the management of IBD patients that requires careful planning and a structured system. In adolescent IBD patients, a structured transition
system has been associated with improved outcomes such as rates of hospitalization, need for surgery, medication adherence, and clinic visit attendance.\textsuperscript{[13]}

Another article in this issue aimed to evaluate the current state of IBD transition of care in KSA by surveying pediatric and adult gastroenterologists.\textsuperscript{[14]} The authors performed a nation-wide survey that was distributed to all pediatric and adult gastroenterologists in the country. The survey included close-ended questions regarding current transition practices, preferred methods of transition, and factors affecting transition of care in IBD. The survey response rate was 26% (80/306). An overwhelming majority of respondents (74%) do not follow a transition of care protocol and 79% rated having such a protocol as “very important.” Potential barriers to having a successful transition protocol that were rated as “very important” were poor coordination between care providers (59%) and difficulty in accessing medical records (54%). Good collaboration between stakeholders and patients’ knowledge of their underlying condition and medications were rated as “very important” by about two-third of the responders. This study demonstrates the paucity of structured IBD transition of care programs in KSA. However, findings are limited by the use of a nonvalidated questionnaire and low response rate of 26%. However, these findings should act as a calling to further study a nation-wide IBD transition program. Multiple societal documents have provided guidelines on transition of care in IBD patients that can be utilized to develop such a system.\textsuperscript{[15-17]}

The rising incidence of IBD in KSA has multiple implications that are highlighted in the two studies published in this issue of the Journal. Screening for IBD using the RFS in IBS patients is an intriguing proposal. To better elucidate the prevalence of a high RFS in this patient population, larger multicenter studies are warranted. Ideally, these studies will also investigate the real life correlation of a high RFS with objective measures of inflammation such as ileocolonoscopy. With the rising incidence of pediatric IBD, effective transition to adult care should be thoroughly investigated. Initially, a validated questionnaire with a higher response rate can investigate barriers, challenges, and preference of a transition of care system. This can be followed by measuring clinical outcomes before and after implementing a structured transition system.

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