Irritable bowel syndrome: What physicians should know?

Functional gastrointestinal disorders (FGIDs) including irritable bowel syndrome (IBS) account for a significant number of patients in primary care settings with abdominal symptoms. The prevalence of IBS in the general population varies with the definition of FGIDs. Under the current Rome III criteria, IBS is categorized in functional bowel disorders and the prevalence of IBS ranges between 1.1% and 29.2%.[1]

The pathophysiology of IBS is complex and remains obscure, despite an extensive investigation into the mechanisms involved in its development. More time is required before a clearer understanding of the pathophysiology underlying IBS can be established. However, it is important to appreciate what knowledge is currently available, and the review in this issue of the journal summarizes it well.[2]

The definition of IBS has changed a number of times in a series of attempts to better define the disease entities. The Rome III criteria are presently being used, and these are expected to be replaced by the Rome IV criteria in 2016. It has been argued that frequent changes in definitions creates confusion among clinicians and can lead to changes in the prevalence. However, detailed definitions might not be required in clinical settings as subjective diagnoses by physicians are also important in the treatment of patients with IBS. This review summarizes interactions between the irritable bowel and the brain. It is important to recognize such interactions, and a holistic approach should be taken when managing these patients. Abdominal symptoms should not be the only focus of improving the quality of life, and positive patient-physician relationships should be established to realize patient goals.[3] These issues are important for treating IBS as it is not currently known to be associated with the development of serious disease and with mortality.

The brain-gut axis is unquestionably an important mechanism of IBS and interactions between the nervous system and the gastrointestinal tract are believed to be bidirectional.[4] Though it is likely to be a case of chicken and the egg, the question of which site should be targeted for first line treatment should be the focus of future research. Intestinal microbiota and its metabolites are involved in the modulation of gastrointestinal functions, affecting intestinal permeability, as well as mucosal immune function and sensitivity,[5,6] and have been a recent trend in IBS research. A diet low in fermentable oligosaccharides, disaccharides, monosaccharides, and polyols has been found to be effective in reducing functional gastrointestinal symptoms in IBS.[7] Therefore, a dietary intervention is a useful option for the treatment of IBS in daily clinical practice.

Some individuals are susceptible to IBS, indicating a role of genetic and environmental factors.[8] Therefore, more focus on identifying such individuals might be important to predict and prevent the development of IBS. However, this would require gathering genetic and personal information to identify such factors in individuals. Nevertheless, background information is necessary to ensure that patients with IBS receive appropriate treatment. A history of childhood abuse and mood disorders may affect the development and persistence of IBS symptoms.[9,10] Stress can change the threshold of sensation and lead to hypersensitivity. When genetic and environmental factors are involved in the development of symptoms, physicians might also need to advise patients to make lifestyle or social changes to avoid certain stressors. In such cases, a psychological approach may prove to be more effective than pharmacotherapy targeting gastrointestinal tract.

Although, further study is needed to reveal the pathophysiology of IBS, an individualized holistic approach is needed for each patient.

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Quick Response Code:	Website: www.ruralneuropractice.com
	DOI: 10.4103/0976-3147.168422

How to cite this article: Oshima T, Miwa H. Irritable bowel syndrome: What physicians should know? J Neurosci Rural Pract 2015;6:467-8.