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Is There True Gender Difference of Irritable Bowel Syndrome in Asia?

TO THE EDITOR: Irritable bowel syndrome (IBS) is very common, although it is not a life-threatening condition. Although in Western countries, up to 20% of adults suffer from IBS, including those who have not consulted physicians,[1] the prevalence in Eastern countries tends to be lower and ranges from 6.5% to 10.1%.[2,3] It usually gives an impact on quality of life through clinical symptoms, consultation, excessive medical care or indirectly by absenteeism from work or school.

The female predominance in IBS is prominent in Western countries with a female-to-male ratio of 2-2.5:1.[4,5] However, female predominance is less apparent in the general population, which suggests that women with IBS are more likely to seek healthcare for their symptoms.[4] However, some Asian studies fail to report significant gender differences in the prevalence of IBS.[6]

The symptom presentation, IBS subtypes, pathophysiological response and treatment response may offer some clues for the observed gender difference in IBS. The female predominance is more apparent in the IBS with constipation compared to IBS with diarrhea and alternating pattern.[5] Although gender differences in colon transit, visceral hypersensitivity or brain-gut interaction have not been reported consistently, there were several conflicting reports according to the menstrual cycle or hormone replacement.[5,6]

Interestingly, Makharia et al[7] reported a female preponderance of IBS prevalence in India. The previous hospital-based IBS prevalence studies from India showed a male predominance related more with health seeking behaviors of men.[8,9] Makharia et al[7] explained that the observed female predominance could arise from the differences in the sex hormones. A recent systematic review suggested that increased gastrointestinal symptoms in IBS were strongly associated with the effect of menstrual cycle, and it might be related with ovarian hormones on visceral hypersensitivity.[10] However, it is still not clear whether the gender difference of IBS prevalence is truly related with physiologic difference or different consultation behaviors. Consultation behaviors are determined by many factors, such as disease severity, convenience of medicine access, emotional stress or socio-cultural background. However, the IBS definition by Rome II or III criteria is not comprehensive in Asia[3] and does not include the concept of comprehensive disease severity.

The merit of epidemiologic studies lies in that it is comprised of a wide range of data and the collection of large study population, however, methodological limitation, such as the quality of data and the potential bias should be considered. In addition, gender differences and the effect of female sex hormones have generally been understudied in IBS. However, it is important to determine whether there are true differences according to gender in IBS because these studies may potentially impact the understanding of IBS, including pathophysiology or treatment modalities.

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