## Are Solifenacin and Ramosetron Really Ideal to Treat Irritable Bowel Syndrome?

TO THE EDITOR: Apart from the annoying bowel symptoms, irritable bowel syndrome (IBS) patients usually have various extra-intestinal co-morbidities in terms of insomnia, depression, chronic fatigue syndrome, fibromyalgia, chronic pelvic pain and lower urinary tract symptoms. 1,2 Accordingly, a concept of central sensitivity syndromes (CSS) has been addressed to include IBS and its extra-intestinal co-morbidies because these disorders share an evident biopsychosocial disturbance, eg, interstitial cystitis is one of CSS components.<sup>3</sup> Besides, it remains unknown whether overactive bladder (OAB), another lower urinary tract disorder, should be enrolled in the CSS family because literature do not indicate their closed association. Based on an open-labeled and cross-over trial, Fukushima et al4 in the July 2012 issue of this journal indicated that solifenacin, an agent recommended to treat OAB,5 was very effective in relieving IBS overall symptoms with an efficacy not inferior to ramosetron. I agreed that solifenacin in the present study was obviously off-labeled and used to explore its applicableness on IBS patients since antispasmodics have long been recommended to treat IBS, as this OAB agent also exhibits antispasmodic ability. 5,6

Overall, several issues in this article remain debatable. Regarding the assessment of IBS overall improvement, the authors pointed out that both agents reached up to 80%-90%. It looks very dramatic with an efficacy almost doubling others. For example, a large-scaled and open-labeled trial conducted on Korean IBS patients indicated that both ramosetron and mebeverin displayed a comparable responded efficacy around 38%. Our previous antispasmodic study also reported the limited efficacies of otilonium bromide and mebeverin in treating IBS main symptoms. It seems that the authors should clearly address what was the definition to assess IBS overall improvement among their trial. Alternatively, their excellent efficacy showed a superiority exceeding the well-accepted data for treating IBS. Unlike other cross-over trials, present study did not design an allowable washout period when the treatment was immediately switched from

solifenacin to ramosetron. Did the authors ignore the possible solifenacin residual pharmacological impact on the early days of ramosetron treatment? Third, solifenacin to treat OAB often has the constipation side effect with an odds ratio of 3.02. It is controversial whether the result of diminished bowel movement frequency was the solifenacin side effect or true therapeutic effect. Finally, Figure 2C depicts the duration of pain during various visits, and why is the y-axis labeled as "scores" rather than the recorded number of days?

## Full-Young Chang

Environmental Heath and Safety Office Division of Gastroenterology, Taipei Veterans General Hospital National Yang-Ming University School of Medicine, Taipei, Taiwan

- Riedl A, Schmidtmann M, Stengel A, et al. Somatic comorbidities of irritable bowel syndrome: a systematic analysis. J Psychosom Res 2008;64:573-582.
- Guo YJ, Ho CH, Chen SC, Yang SS, Chiu HM, Huang KH. Lower urinary tract symptoms in women with irritable bowel syndrome. Int J Urol 2010;17:175-181.
- Yunus MB. Fibromyalgia and overlapping disorders: the unifying concept of central sensitivity syndromes. Semin Arthritis Rheum 2007; 36:339-356.
- Fukushima Y, Suzuki H, Matsuzaki J, Kiyosue A, Hibi T. Efficacy
  of solifenacin on irritable bowel syndrome with darrhea: open-label
  prospective pilot trial. J Neurogastroenterol Motil 2012;18:317-323.
- Meek PD, Evang SD, Tadrous M, Roux-Lirange D, Triller DM, Gumustop B. Overactive bladder drugs and constipation: a metaanalysis of randomized, placebo-controlled trials. Dig Dis Sci 2011; 56:7-18.
- Frissora CL, Cash BD. Review article: the role of antibiotics vs. conventional pharmacotherapy in treating symptoms of irritable bowel syndrome. Aliment Pharmacol Ther 2007;25:1271-1281.
- Lee KJ, Kim NY, Kwon JK, et al. Efficacy of ramosetron in the treatment of male patients with irritable bowel syndrome with diarrhea: a multicenter, randomized clinical trial, compared with mebeverine. Neurogastroenterol Motil 2011;23:1098-1104.
- Chang FY, Lu CL, Luo JC, Chen TS, Chen MJ, Chang HJ. The evaluation of otilonium bromide treatment in Asian patients with irritable bowel syndrome. J Neurogastroenterol Motil 2011;17:402-410.

Letters to the Editor

9. Tillisch K, Labus J, Nam B, et al. Neurokinin-1-receptor antagonism decreases anxiety and emotional arousal circuit response to noxious visceral distension in women with irritable bowel syndrome: a pilot study. Aliment Pharmacol Ther 2012;35:360-367.

Conflicts of interest: None.