RESEARCH HIGHLIGHTS

MOTILITY

CRF-1 antagonists fail to improve bowel function in IBS

Disappointing findings from a new study question whether agents that alter the brain–gut stress response mediated by corticotrophin releasing factor (CRF) will be useful for the treatment of IBS. Administration of a CRF receptor 1 (CRF-1) antagonist to women with diarrhea-predominant IBS did not improve colonic transit.

Patients with IBS often have an increased response to stress; this hypersensitivity has been associated with accelerated colonic transit and abnormal bowel functions. CRF has an important role in regulating the brain–gut stress response. In preclinical studies, a CRF-1 antagonist reduced colonic motility and the frequency of diarrhea in stressed rats, which suggested that peripheral CRF receptors influence gastric motility. These findings led Seth Sweetser and colleagues to investigate whether a CRF-1 antagonist could restore normal bowel function in patients with IBS.

In this double-blind study, the researchers randomly allocated 39 women with diarrhea-predominant IBS to receive either placebo or a CRF-1 antagonist. Eligible patients had accelerated colonic transit at baseline, and their levels of anxiety and somatization were characterized. The treatment had no significant effect on colonic transit, gastric emptying, stool frequency or consistency. "These findings question the potential of such pharmacological approaches for patients with diarrhea-predominant IBS who manifest the usual levels of stress associated with this syndrome," concludes Michael Camilleri, lead investigator of the study group.

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Original article Sweetser, S. et al. Do corticotropin releasing factor-1 receptors influence colonic transit and bowel function in women with irritable bowel syndrome? Am. J. Physiol. Gastrointest. Liver Physiol. 296, G1299–G1306 (2009).