

English: The potential impact of nutritional intake on symptoms severity in patients with comorbid migraine and irritable bowel syndrome

Abstract

Background: Specific dietary recommendations for migraine patients with comorbid irritable bowel syndrome (IBS)

are lacking. This work aimed to study the severity scores of such two common pain-related disorders in relation to

various macronutrients and micronutrients intake.

Methods: A cross-sectional study was conducted on patients with concomitant migraine and IBS. The frequency and

intensity of migraine attacks and the severity of IBS were evaluated. Data on dietary intake were collected using food

frequency questionnaires and 24-hour dietary recall.

Results: One-hundred patients with a median age of 36 years participated. The severity scores for migraine and IBS

were positively correlated with fat and copper and negatively correlated with fiber and zinc intake. Copper intake was

an independent predictor of the severity of both migraine and IBS (P 0.033, <0.001). Patients with episodic migraine

(*n*= 69) had a significantly higher frequency of cooked, fresh vegetables, and wheat bran bread intake (P 0.009, 0.004,

0.021) and lower frequency of hydrogenated oils intake (P 0.046), in comparison to patients with chronic migraine

(*n*= 31). Patients with moderate intensity of migraine (*n*= 37) had a significantly higher frequency of herbal drinks

intake (P 0.014) than patients with a severe intensity of migraine (*n*= 63). Patients with mild (*n*= 13) and moder

ate IBS (*n*= 41) had a significantly higher frequency of wheat bran bread and sen bread intake (P 0.003, 0.022) than

patients with severe IBS (*n*= 46).

Conclusion: Patients with comorbid migraine and IBS are advised to adhere to a diet low in fat and copper and rich

in fiber and zinc.

Keywords: Migraine, Irritable bowel syndrome, Macronutrients, micronutrients, Food frequency questionnaire