

Effects of Vitamin D Supplementation in Patients with Irritable Bowel Syndrome: A Randomized, Double-Blind, Placebo-Controlled Clinical Trial.

Abstract

OBJECTIVE:

There are some evidence that Vitamin D supplementation may be beneficial for patients with irritable bowel syndrome (IBS). The aim of this study was to evaluate the effects of Vitamin D supplementation on symptoms and quality of life (QOL) in patients with IBS.

METHODS:

In a randomized, double-blind, placebo-controlled clinical trial, 116 patients with IBS were supplemented weekly with either a pearl of 50,000 IU Vitamin D or an identical pearl of placebo containing medium chain triglyceride for 6 weeks.

RESULTS:

Mean age of patients was 42.24 ± 12.26 , and 40.06 ± 13.37 in Vitamin D and placebo groups, respectively. Dietary intakes were similar between and within groups. Serum concentration of 25-hydroxy Vitamin D increased significantly from 21.10 ± 5.23 to 36.43 ± 12.34 in the Vitamin D group ($P < 0.001$), while it was not significantly different before and after the trial in placebo group. The IBS symptoms severity scores (SSSs), disease-specific QOL, and total score were evaluated at weeks 0 and 6. IBS-SSS, IBS-QOL, and the total score were improved significantly more in Vitamin D group in comparison to the placebo group ($P < 0.05$).

CONCLUSIONS:

This study indicates that Vitamin D therapy can improve the severity of symptoms and QOL in patients with IBS; however, the long-term effects remained to be elucidated.