

Vitamin D Supplementation Seems to Improve Fibromyalgia Symptoms: Preliminary Results.

[de Carvalho JF](#), [da Rocha Araújo FAG](#), [da Mota LMA](#), [Aires RB](#), [de Araujo RP](#).

Abstract

BACKGROUND:

Vitamin D deficiency and insufficiency have been reported in fibromyalgia. However, to the best of our knowledge, only one study has evaluated the role of 25-hydroxyvitamin D [25(OH)D] supplementation on fibromyalgia symptoms.

OBJECTIVES:

To analyze the effects of 3 months of 25(OH)D supplementation on symptoms of fibromyalgia.

METHODS:

This study included 11 female patient. Demographic and clinical data, tender points, visual analog scale results, and pre- and post-serum levels of 25(OH)D supplementation were analyzed. The levels of 25(OH)D were measured by a radioimmunologic test.

RESULTS:

Patients with fibromyalgia diagnosis and 25(OH)D values ≤ 30 ng/ml were recruited to receive 50,000 IU of oral vitamin D once every week for 3 months. The disease was diagnosed based on the American College of Rheumatology criteria. The median age of all patients was 48.5 (28-67) years and 63.4% were Caucasian. Disease duration varied from 1-10 years. The 25(OH)D levels increased significantly after 3 months, 18.4 (15.5-25.8) ng/ml vs. 33.8 (28-58) ng/ml, $P = 0.01$. Interestingly, an improvement of visual analog scale scores was observed at 3 months, 90 (0-100) vs. 30 (0-80), $P = 0.002$. Eight patients (72.2%) responded that they experienced a very significant improvement in symptoms. In addition, a trend for reduction of the number of tender points was observed after 3 months, 17 (11-18) vs. 10 (0-18), $P = 0.07$.

CONCLUSIONS:

The 25(OH)D levels and disease symptoms in patients with fibromyalgia and vitamin D deficiency/insufficiency seem to improve with vitamin D supplementation.