Omega-3 and Zinc supplementation as complementary therapies in children with attention-deficit/hyperactivity disorder

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Abstract

Objective:
The aim of this study is to evaluate the effect of zinc and omega-3 supplements as adjunctive drugs in the treatment of attention-deficit/hyperactivity disorder (ADHD) of children.

Methods:
This study is a randomized, double-blind clinical trial conducted on 150 children aged 6–15 years old that diagnosed as new cases of ADHD. Study subjects were evaluated for 8 weeks. Besides of drug of choice (methylphenidate) for the ADHD, patients received placebo in the control group (n = 50), zinc sulfate in second group (n = 50), and omega-3 (n = 50) in third group. Clinical improvement was checking by Conners' Parent and Teacher Rating Scales before and in 2nd, 4th, and 8th week of treatment. Results were analyzed with SPSS version 16 software.

Findings:
In this study, mean scores of Conners' scale showed significant improvement during treatment in the zinc group compared to control group in children that affected to attention-deficit disorder subtype of ADHD (P = 0.02). Moreover, in omega-3 group, better clinical response was seen than other groups (P < 0.05). However, there was no significant difference between omega-3 group compared to placebo group in the mean scores of Conners' scale (P = 0.89).

Conclusion:
Zinc supplementation accompanied by the main treatment significantly improves symptom of attention-deficit disorder subtype of ADHD. However, omega-3 supplementation was superior to zinc and placebo in the clinical improvement of ADHD.