

The evaluation of fish oil (Omega-3 fatty acids) efficacy in treatment of primary dysmenorrhea in high school female students in Hamadan

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Abstract

Background&Objective: Primary dysmenorrhea is one of the common causes of absence from work place and life quality among women. According to some studies, fish oil administration results in production of weaker prostaglandin's (PG) and reduces the severity of dysmenorrhea. The aim of this study is to experience the efficacy of fish oil on dysmenorrhea, which is a cheap drug and with low side effects.

Materials&Methods: In this clinical trial, the students separated into two groups those affected with primary dysmenorrhea by referring to girls' high schools and complete the questionnaires. In the next stage randomly were selected two groups each group included 22 students with primary dysmenorrhea. In first group fish oil capsules and the other group placebo were recommended for duration of two months. These students were evaluated before drug recommendation, at the end of two months treatment and two months afterward. In these three stages pain severity by VAS (Visual Analogue Scale) system and pain duration by Cox scaling system were be recorded in each group.

Results: There is not meaningful statistically difference in the average age, age of menarche, menstrual condition (regular or irregular) and accompaniment with symptoms of PMS (premenstrual syndrome) between fish oil and placebo groups. Before recommendation of capsules the average of pain severity did not have a meaningful statistically difference between two groups. The average pain duration also had similar situation. After two months treatment, the average of pain severity (VAS) in fish oil group was significantly less than which in placebo group ($p<0.05$). Also the average of pain duration in fish oil group was less than which in placebo group with a statistical difference of ($p<0.05$). Moreover, two months after the end of treatment the average of pain severity (VAS) and pain duration (hour) had meaningful statistically difference between fish oil and placebo groups and were less in fish oil group.

Conclusion: As compared with placebo, the fish oil capsule after two months of consumption had a significant effect on reduction of pain severity and duration in primary dismenorrhea. Also two months afterward from the end of this clinical trial the effect was more than placebo.

Key words: Fish oil- Dysmenorrhea- Omega-3 fatty acids