Effect of omega-3 fatty acids on intensity of primary dysmenorrhea.

Rahbar N, Asgharzadeh N, Ghorbani R.

Department of Obstetrics and Gynecology, Amir-al-Momenin Hospital, Faculty of Medicine, Semnan University of Medical Sciences, Semnan, Iran.

OBJECTIVE: To examine whether dietary supplementation with omega-3 fatty acids relieved symptoms of primary dysmenorrhea.

METHODS: Women aged 18-22 years with primary dysmenorrhea were enrolled in a double-blind crossover study. Women assigned to group 1 (n=47) received 1 omega-3 capsule daily for 3 months, followed by placebo for 3 months. Women in group 2 (n=48) received placebo for 3 months, followed by omega-3 for 3 months. A washout period was performed in both groups. Participants used 400mg of ibuprofen as a rescue dose if severe menstrual pains were experienced.

RESULTS: A marked reduction in pain intensity was observed after 3 months of treatment with omega-3 fatty acids (P<0.05). Women who received omega-3 fatty acids required fewer rescue doses than women who received placebo (P<0.05). The mean numbers of ibuprofen tablets used after 3 months with omega-3 fatty acids were 4.3±2.1 (group 1) and 3.2±2.5 (group 2); the mean numbers of tablets used after 3 months of placebo were 5.3±2.2 (group 1) and 6.0±2.6 (group 2) (P=0.001 for both).

CONCLUSION: Supplementation with omega-3 fatty acids reduced the symptom intensity of primary dysmenorrhea. Supplementation efficacy was sufficient to decrease the ibuprofen rescue dose.