تأثیر مکمل باری اسیدهای چرب۴ω بر وضعیت تغذیه‌ای آهن در بیماران مبتلا به سرطان معده تحت شیمی درمانی

عملکرد: بررسی وضعیت تغذیه‌ای آهن در بیماران مبتلا به سرطان معده تحت شیمی درمانی نشان داد که مصرف مکمل باری اسیدهای چرب۴ω می‌تواند باعث بهبود وضعیت آهندگی در بیماران مبتلا به سرطان معده تحت شیمی درمانی شود.

نتیجه‌گیری: مصرف مکمل باری اسیدهای چرب۴ω می‌تواند باعث بهبود وضعیت آهن در بیماران مبتلا به سرطان معده تحت شیمی درمانی شود.
The effect of ω3 fatty acids supplementation on iron nutritional status in patients with gastric cancer during chemotherapy

Nemati A1*, Ettehad G2

1- Department of Basic Sciences, School of Medicine, Ardabil University of Medical Sciences, Ardabil, I. R. Iran.
2- Department of Microbiology, School of Medicine, Ardabil University of Medical Sciences, Ardabil, I. R. Iran.

* Corresponding Author: ali.nemati@arums.ac.ir

Abstract:

Background: Taking certain supplements in patients with gastric cancer may improve iron deficiency. This study aimed to examine the effects of ω3 fatty acid intakes on iron intake status in patients with gastric cancer during chemotherapy.

Materials and Methods: In this study, 30 adult volunteer patients (15 cases and 15 controls) with gastric cancer during chemotherapy were selected. Fasting blood samples were taken for measuring iron, TIBC and transferrin at the beginning, middle and end of the study. Supplementation of ω3 fatty acid for 3g (1.8 g EPA & 1.2 g DHA) and placebo were given for the intervention and control groups for one and a half months, respectively. Blood samples for biochemical measurements were repeated on days 30 and 45 days after the intervention. The 24 hour dietary recall for three days was taken from both groups.

Results: The results showed that iron intake, and serum levels of transferrin and iron in the intervention group were significantly higher and serum levels of TIBC lower than the control group at the end of the study (P<0.05).

Conclusion: Results show that ω3 three fatty acids supplementation can improve the iron intake status in the gastric cancer patients during chemotherapy.

Keywords: Supplementation, ω3 fatty acid, Gastric cancer, Chemotherapy, Iron intake status