

عنوان مقاله:

The Effect of Selenium on Micro-Albuminuria in Diabetic Patients: A Randomized Clinical Trial

محل انتشار:

مجله دیابت و چاقی ایران، دوره 12، شماره 4 (سال: 1399)

تعداد صفحات اصل مقاله: 9

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خلاصه مقاله:

Objective: Oxidative stress plays an important role in the onset and progression of diabetic nephropathy. So antioxidant agents may be one of the key treatment strategies for prevention of diabetic nephropathy progression. The aim of this study was to determine the effect of selenium (Se) on micro-albuminuria in type 2 diabetic (T2DM) patients. **Materials and Methods:** This study was a clinical study on 60 T2DM patients with micro-albuminuria who were referred to Yazd diabetic research center from March 2016 till April 2017. Patients were randomized in to two groups: Se (200 microgram Se daily) and control. The control group did not receive placebo. The intervention duration was 12 weeks. Micro-albuminuria, fasting blood sugar (FBS), cholesterol, triglycerides, HDL-C, LDL-C, urea, creatinine, HbA1c, plasma Se concentration were measured at the baseline and after 12 weeks. **Results:** Micro-albuminuria decreased after 12 weeks in both studied groups but it was not statistically significant. Cholesterol and LDL levels improved statistically in both studied groups at the end of study (P-value: 0.034, 0.023 respectively). Plasma Se level increased in intervention group (P-value< 0.001). There were clinically improvement in other studied variables after 12 weeks in two studied groups but not statistically significant **Conclusion:** Our study demonstrated that Se supplementation for 12 weeks among patients with micro-albuminuria had no beneficial effects on micro albuminuria

کلمات کلیدی:

Selenium, Diabetic Nephropathy, Oxidative stress, Albuminuria, Diabetes Mellitus, Type II

