

عنوان مقاله:

THE EFFECTS OF VITAMIN D3 SUPPLEMENTATION ON SOME METABOLIC AND INFLAMMATORY MARKERS IN DIABETIC NEPHROPATHY PATIENTS WITH MARGINAL STATUS OF VITAMIN D: A RANDOMIZED DOUBLE BLIND PLACEBO CONTROLLED CLINICAL TRIAL

محل انتشار:

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خلاصه مقاله:

Background and Aim: Diabetic nephropathy is known to be an independent risk factor in the progression of renal and cardiovascular disorders. Due to the association between vitamin D deficiency and diabetic nephropathy, vitamin D deficiency in the diabetic nephropathy population, this study conducted to examine the effects of Vitamin D3 on metabolic and inflammatory parameters in patients with diabetic nephropathy. **Methods:** This eight-week, randomized, double-blind, placebo-controlled trial was carried out on 50 diabetic nephropathy patients with marginal status of vitamin D. Participants were randomly assigned to two groups: control and intervention. Participants received a vitamin D3 (50000 IU) supplement weekly on a specific day. Fasting blood samples were collected from all patients at their entry to the study, and eight weeks after intervention. **Results:** Analyses showed significance differences in physical activity between the intervention and placebo groups ($P=0.018$). There were no significant differences between the percentage changes of HbA1c, insulin and, inflammatory parameters such as TNF- α and IL-6 ($P> 0.05$), while the percentage change of FBS was significantly higher in the placebo group compared to the treatment one ($p<0.0001$). Lower levels of FBS ($p<0.0001$), insulin ($p<0.069$), HOMA-IR ($p<0.001$), TNF- α ($p<0.002$) and IL-6 ($p<0.037$) were found after supplementation in treatment group. However, the phosphorous and protein percentage change in urine were lower ($p=0.07$) and higher ($p=0.003$) between groups. **Conclusion:** It was found that vitamin D supplementation can be regarded as an effective way to prevent the progression of diabetic nephropathy by reducing levels of proteinuria, and inflammatory markers such as TNF- α and IL-6

کلمات کلیدی:

Vitamin D, Nephropathy, Diabetes

