

## **Assaying the Therapeutic Effects of Sevelamer on Blood Sugar Level, HbA1c Level, Lipid Profile, and hsCRP Inflammatory Factor in Patients with Diabetic Nephropathy.**

**Background & Objective:** Today, diabetes is one of the most important health problems and one of the most important and most feared complications of diabetes is, its renal complications. The aim of this study was to evaluate the therapeutic effects of Sevelamer to reduce blood sugar levels, HbA1c, blood lipids and hs-CRP in patients with diabetic nephropathy.

**Methods:** Of patients who have inclusion criteria, 30 patients had diabetic nephropathy at stage 2 to 4 and phosphorus in the range of 4 to 6.5 mg/dl of blood and blood sugar of 100 to 400 mg/dl and not receive treatment for hyperphosphatemia were selected. At baseline, for all diseases, tests include CBC with diff, BS, BUN, Cr, hs-CRP, HbA1c, Ca, P, TG, Chol, LDL (c), HDL (c) was requested and the results in the questionnaire containing demographic and disease information was recorded. Then, Sevelamer tablets (800 mg) was given, twice daily, with a meal. After a month of beginning treatment with Sevelamer, CBC with diff, BS, BUN, Cr, Ca, P, hsCRP again requested. At the end of the second month after the beginning of treatment, in addition to the tests conducted in the first month TG, Chol, LDL (c) and HDL (c) was requested. In the third month, HbA1c test in addition to the tests conducted in the first month was requested for patient. Inclusion criteria was treated patients due to diabetic nephropathy with 45 years. Exclusion criteria was use of certain medications, presence of associated malignancy with diabetic nephropathy.

**Results:** In this study, 18 patients with an average age of  $61/22 \pm 9/328$  years were enrolled. 5 patients (27.8%) were male and 13 patients (72/2 percent) were female. The results showed that the average BMI in patients was  $28/42 \pm 1/9$ . After taking Sevelamr significant decreases was in HbA1c and postprandial glucose test, phosphorus in patients but changes in lipid profile and CBC with diff, BS, BUN, Cr, Ca, hsCRP were not observed.

**Conclusion:** According to the results of this study using Sevalamr addition to reducing the amount of phosphorus have an important role in reducing HbA1c and postprandial blood sugar levels. Sevelamer showed no significant effects on lipid profile and hs-CRP.

**Keywords:** diabetic nephropathy – Chronic kidney disease – sevelamer.