

## **EFFICACY OF SITAGLIPTIN IN RETARDING THE PROGRESSION OF ALBUMINURIA AND ASSESSING ITS SAFETY AND EFFICACY IN PATIENTS WITH DIABETIC NEPHROPATHY**

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### **BACKGROUND:**

Diabetes mellitus is the most common cause of Chronic Kidney Disease. Microalbuminuria is an early sign of diabetic nephropathy. ACE inhibitors decrease albumin excretion and prevent its progression. Sitagliptin, a novel therapeutic agent for type2 diabetes mellitus. So, this study carried out to investigate the effect of sitagliptin in albuminuria along with ACE inhibitors and its efficacy, safety of glycemic profile in diabetic nephropathy.

**AIM:** This study evaluated the efficacy of sitagliptin in retarding the progression of albuminuria, and assessing its safety of glycemic profile in patients with type 2 diabetes with early stage of nephropathy.

**METHODS:** In this randomized open label study, Patients with diabetic nephropathy were randomized to two groups (n=30 each). Control group received oral Anti Diabetic Drugs+ Tab. Enalapril 2.5 mg and study group received ADD + Tab.Enalapril2.5mg+ Tab. Sitagliptin 100 mg. Patient evaluated at the end of 24 weeks.

**RESULTS:** Urinary Albumin Creatinine Ratio decreased from 302.10 to 143.83 at 24 weeks in the sitagliptin treated group (P value=0.001) and in control group UCAR value reduced from 324.10 to 290.93 mg/gm. Statistically significant reductions in HbA1C, FBS, PPBS, SBP were observed with sitagliptin treated group. Adverse effects reactions were less in the study group (10%) compared to control (26%) group

**CONCLUSION:** Sitagliptin significantly reduced albuminuria and improved glycemic control and was well tolerated in patients with early stage diabetic nephropathy.

**Key words:** Diabetic nephropathy, DPP4 inhibitor, albuminuria