

Effect of Sitagliptin on glycemic profiles and their correlation with PASI score in patients with plaque psoriasis

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Abstract

Psoriatic patients with plaque psoriasis particularly those with high body mass index have increasing risk of developing a diabetes mellitus type 2 (DM). Since both conditions are associated with dysregulation in DPP-IV, DPP-IV inhibitors have been suggested as therapeutic drugs for both diseases. The role of enzyme in the diabetes pathogenesis is well-known; however information on psoriatic patients is conflicting. The objective of this study is to determine the effect of Sitagliptin on glycemic profiles and their correlation with PASI score in psoriatic patients with DM. The study was conducted on 50 diabetic patients with moderate to severe plaque psoriasis who were divided into two groups: Placebo group ($n = 25$) Patients were administered placebo 100mg once daily plus dietary control and exercise for 3 months ; Sitagliptin group ($n = 25$) Patients were administered Sitagliptin tablet 100mg once a day plus dietary control and exercise for 3 months. PASI score for all patients was assessed before and after 12 weeks of treatment. The blood samples were obtained from the patients in both groups at baseline and after 12 week of therapy were used to measure the concentration of serum fasting blood sugar and HbA1c. Compared with baseline in Sitagliptin group and control group after 12 week, the level of fasting blood sugar, HbA1c, were significantly reduced and correlated with PASI score after 12 week of sitagliptin treatment ($P < 0.05$). The current results reveal that sitagliptin improves psoriasis possibly via a reduction in glycemic profiles which were significantly correlated with PASI score.

Keywords: Psoriasis; Diabetes; Sitagliptin; PASI score; Correlation

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