gliptin as a combine therapy, showed a significant results in reducing total body weight, body mass index (BMI), fat mass, and tissue fat percentage and also the waist circumference (WC), and ended with the elevation of adiponectin level.
It still need further clinical research on a larger scale and also long-term gliptin treatment to determine the exact mechanism and the beneficial effects of gliptin on serum adiponectin.
In our clinical trial, there were significant improvement on the level of adiponectin after giving a gliptin as an add-on therapy for 6 months to prior diabetes management to the T2DM MetS subjects and also for the decrease of bodyweight.

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CHANGE IN BODYWEIGHT AND IMPROVING ADIPONECTIN LEVEL DURING GLIPTIN THERAPY IN T2DM-METS

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Background: Present study showed that despite the significant relationship of adiponectin with fasting triglyceride level and abdominal obesity in T2DM-MetS. In such patients, successful weight loss can improve glycemic control, as well as reduce concomitant cardiovascular risk factors,like hypertension and dyslipidemia. Large fat cells resist insulin-mediated lipolysis suppression, resulting in excess release of free fatty acid (FFA). Gliptin inhibits fat extraction from the gut, although it is in lesser degree compare with a lipase inhibitor agent such orlistat, this could be the one benefit of the Gliptin therapy. Adiponectin is synthesized at the adipocytes tissue and delivered into the bloodstream. High levels of adiponectin give benefits as anti-diabetic and anti-atherosclerotic effects. Weight loss during Gliptin therapy, probably caused by a reduction in visceral fat, and consequently there will be an increased in levels of adiponectin. This study aimed to see the correlation between the change of bodyweight and adiponectin improvement during gliptin therapy in T2DM-MetS patients.
Method: This is a retrospective study. We select 300 medical records from private out patient diabetes and endocrine clinic patients. And 60 patients were eligble to involve in our study. We select patient who received oral diabetic agent, subject with insulin, Thiazolidinediones and cacium channel blocker were elimanate from this trial. During the observation for 24 weeks, 10 subjects were eliminated because of dose adjusment on their oral anti diabetics agent, and addition of other anti diabetic agent. We collect the data such as bodyweight, age, HbA1c, and adiponectin level from the beginning and at the end of observation period. We calculate the change of body weight, HbA1c level, and Adiponectin. we analyzed the relationship between changes in body weight and levels of adiponectin using spearman test.
Result: The subjects mean of age were: 58.98±10.03 years, average levels in A1C before therapy: 8.72±2.08 while after giving gliptin therapy is 7.51±1.911. While for the average levels of adiponectin before given gliptin therapy are 5.77±2.49 and after therapy was 5.87±2.46. For the mean of body weight before gliptin therapy: 82.22±14.54 kg, and after gliptin therapy was 81.22±14.15. And the mean of adiponectin level was 5.77±2.49, and after gliptin therapy: 5.87±2.46. there was significant in decrease of bodyweight ($r = -0.997$; $p < 0.001$); significant improvement in adiponectin level ($r = -0.998$; $p < 0.001$). Statistical analysis between two variables show no significant correlation between bodyweight change and adiponectin improvement ($r = 0.697$; $p < 0.001$).
Conclusion: Decrease of bodyweight in this study doesn't have significant correlation with Improvement of adiponectin levels. The adiponectin improvement probably through the other pathomechanism. Reactive Oksigen spesies and other pro-oksidan which are altering the adiponectin level, could be the explainable cause for these results.

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ALTERNATE-DAY DOSING OF LOW DOSE (7.5MG/DAY) PIOGLITAZONE EFFECTIVE IN INDIAN PATIENTS WITH TYPE 2 DIABETES MELLITUS

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Background: In spite of substantial evidence of the beneficial effects of pioglitazone, clinicians are hesitant to use pioglitazone because of certain concerns and controversies. Low dose pioglitazone (7.5 mg) has been proved safe and effective in prior studies with few studies showing comparable effects as that of standard dose (15 mg) pioglitazone. The purpose of our study was to prospectively evaluate the effectiveness of alternate day dosing of low dose pioglitazone (group 1) compared to standard everyday dosing of low dose pioglitazone (group 2) on metabolic control and the incidence of adverse effects.
Method: The study population consisted of male and female patients aged 34–75years with an established diagnosis of type 2 diabetes, and previously treated with anti-diabetic medications other than pioglitazone. A total of forty patients were randomly assigned to either of the treatment groups. Only those patients whose anti-diabetic medications had remained unchanged during the preceding three months