Comparative clinical study evaluating the effect of adding vildagliptin versus glimepiride to ongoing metformin therapy on diabetic patients with symptomatic coronary artery disease (CAD)

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- Cardiovascular diseases (CVDs) remain the most identified cause of death in patients with diabetes mellitus (DM).
- Eighty patients with uncontrolled T2DM and symptomatic CAD were randomized to Vildagliptin 50 mg/day "group I" or Glimepiride 4 mg/day "group II" to ongoing Metformin therapy (1000 mg/day).
- After 3 months of treatment, group I showed significantly lower BMI (28.73 vs. 30.55), HbA1c (6.05 vs. 7.06), hsCRP (0.96 vs. 1.72), IL-1β (34.95 vs. 45.13), TC (136 vs. 169), and TG (116 vs. 146) than group II.
- Further, as compared to group II, group I significantly increased adiponectin (4.42 vs. 2.52) and HDL-C (61 vs. 48).

In patients with T2DM and symptomatic CAD, the addition of Vildagliptin to ongoing Metformin showed better glycemic control, lower inflammatory markers (IL-1 β and hsCRP), higher protective markers (adiponectin and HDL-C), and improved lipid profile than glimepiride group.