OA-D-24

A COMPARATIVE STUDY ON THE EFFICACY AND SAFETY OF TENELIGLIPTIN VERSUS GLIMEPIRIDE AS AN ADD-ON THERAPY TO METFORMIN MONO-THERAPY IN PATIENTS WITH TYPE 2 DIABETES MELLITUS

https://doi.org/10.15605/jafes.034.02.S42

Shivam,¹ Pratibha Nadig,² Vijaya Sarathi H A,² Manohar KN³

¹Boehringer Ingelheim Pvt Ltd., Mumbai India

²Vyedhi Institute of Medical Sciences and Research Center, Bangalore, India

³Manipal Hospital, Bangalore, India

INTRODUCTION

Type 2 Diabetes Mellitus (T2DM) represents a heterogeneous condition characterized by hyperglycemia as a consequence of defects in insulin secretion, insulin resistance/action or combination of both of these factors. Sulfonylureas are very efficacious and are recommended as second line drugs for treatment in T2DM. Dipeptidyl peptidase-4 inhibitors (DPP-4i) have demonstrated efficacy and safety in patients with inadequate glycaemic control with metformin mono-therapy.

METHODOLOGY

This study was conducted at Endocrinology department at Vydehi Institute of Medical Sciences and Research Center, Bangalore, Karnataka, India after institutional ethics committee approval from January 2017 to December 2017. A total of 40 patients were randomized into two groups after obtaining written informed consent. Group A received Tab. Metformin 1 gm twice a day along with a Tab. Teneligliptin 20 mg once a day and Group B received Tab. Metformin 1 gm twice a day along with Tab. Glimepiride 1 mg once a day for a period of 12 weeks.

RESULTS

There was significant difference in mean HbA1c between two groups at 12 weeks. At Week 12 weeks Mean HbA1c was significantly lower in Glimepiride Group than in Teneligliptin Group. Fasting Plasma Glucose and Post Prandial Plasma Glucose were significantly lower in Glimepiride Group than in Teneligliptin Group. The incidence of adverse effects was more in Teneligliptin group (constipation).

CONCLUSION

The present study showed that addition of glimepiride apart from improving the baseline glycosylated hemoglobin (HbA1c) also led to significant reduction in fasting, post prandial plasma glucose levels, lipid profiles and is well tolerated as compared to Teneligliptin.

KEY WORDS

type 2 diabetes mellitus, glimepiride, teneligliptin, glycosylated hemoglobin

OA-D-25

THE EFFECT OF LOBEGLITAZONE COMBINATION THERAPY IN TYPE 2 DIABETES

https://doi.org/10.15605/jafes.034.02.S43

Yonghyun Kim

Endocrinology, Bundang Jesaeng Hospital, Daejin Medical Center, Seongnam, South Korea

INTRODUCTION

Considering pathophysiology of Type 2 diabetes and glucose lowering effect, metformin and DPP-4 inhibitor combination was the usual first combination therapy option before release of SGLT-2 inhibitor. Adding TZD could be the next best step for delaying progression of diabetes, but TZD is not commonly used because of adverse effect especially in this country. But, we commonly prescribe TZD from the past in our center and after releasing of new TZD drug class in this country, we tried to know the effect of lobeglitazone when it was added in many cases as possible.

METHODOLOGY

We recruited 244 patients who failed to reach HbA1c target below 7% with metformin and DPP-4 inhibitor from 2016 to 2018. We compared A1c change before and after add-on therapy.

RESULTS

The mean age and duration of DM was 61.4 and 9.7 years. BMI was 25.7. The mean metformin dose and duration of DPP-4 inhibitor use was 1520 mg per day and 49.1 months each. The HbA1c level before add on therapy was 7.70%. The HbA1c improvement after 6 months was 0.79% and it was greater than after 3 months of 0.69%. The HOMA-IR was 4.12 and it was improved to 3.18 after 6 months. The mean body weight gain after 3 months was 1.02 kg and it was increased to 1.51 kg after 6 months.

CONCLUSION

Lobeglitazone add on therapy was effective when failed to reach HbA1c target below 7.0% with metformin and DPP-4 inhibitor. The degree was increased after 6 months than 3 months.

KEY WORDS

lobeglitazone combination, type 2 diabetes