A study on the Effects of Acarbose in Reducing Post-Prandial Blood Glucose and Achieving HbA1c Targets in an Asian Indian Population Using a Teletitration Program

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Abstract

The achievement of tight HbA1c levels remains a challenge. Post-prandial glycemic excursions may be reduced by an oral glucose lowering agent that delays or decreases glucose absorption. Acarbose is a commonly used oral antidiabetic agent that delays glucose absorption. Aims: To study the effect of acarbose in reducing post-prandial peak of blood glucose and achieving HbA1c targets in an Asian Indian population using a teletitration program.

Materials & Methods

A total of 102 patients were included, in which the diabetologists had sole responsibility of determining acarbose doses and other therapeutic measures. A written informed consent was obtained. In our centre, we make use of Diabetes Tele Management System (DTMS) in which patients are taught on self-monitoring of blood glucose and HbA1c levels. Acarbose was added to already existing combination therapy.

Results

The Mean HbA1c decreased by 7.46% at baseline and 13.76% by 6 months. The Mean Postprandial blood glucose decreased by 29.24 mg/dl and 56.78 mg/dl by 6 months. The asymptotic glycemic deviation by DTMS among 102 patients over 6 months by means.

Conclusions

In our centre, we make use of Diabetes Tele Management System (DTMS) which patients are taught on self-monitoring of blood glucose and HbA1c levels. In our centre, we make use of Diabetes Tele Management System (DTMS) in which patients are taught on self-monitoring of blood glucose and HbA1c levels. The addition of acarbose to the existing regimen of insulins and oral agents will help achieve target glycemic levels, 2 hours after all the three main meals without any significant adverse events, when the dose titrations were carried out slowly and steadily utilizing a structured teletitration process, in 97.05% of the study population.

References