Beatriz Atonal-Flores, María de la Luz León-Vázquez, Armando Barranco-Juarez

Instituto Mexicano del Seguro Social, Tlaxcala, México

Indicators of diabetesmellitus after liraglutide, sitagliptin/metformin, linagliptin, and sitagliptin

Abstract:

Introduction: The management of diabetes mellitus requires a comprehensive approach, and the different therapeutic options make it necessary to compare their effectiveness with prior treatment regimens.

Objective: To analyze the control indicators of diabetes mellitus after the incorporation of liraglutide, sitagliptin/metformin, linagliptin, and sitagliptin.

Materials and Methods: Observational, analytical, longitudinal study. The control indicators reported in the months of October, November, and December of 2020 were compared with those of 2021. Measurements of glucose, glycated hemoglobin, and blood pressure were selected before and after the use of new drugs in patients with diabetes mellitus over 20 years of age. A descriptive analysis was performed, and for the analysis of repeated measures, the Wilcoxon and McNemar tests were applied, with a p-value ≤ 0.05 considered significant, and a confidence level of 95%, using the IBM-SPSS 24 software.

Results: A total of 352 records were analyzed, 59% of which corresponded to women, aged 26 to 88 years. The control percentage decreased after the change of regimen (38.4% compared to 35.8%) with no statistical difference (p = 0.503). There was no statistical difference in glucose levels, glycosylated hemoglobin, weight, and blood pressure before and six months after the change of regimen. The glycemic control indicator for the months of October, November, and December 2020 compared to the same months in 2021 increased(17.2, 18.7, and 16.3, to 41.6, 47.2, and 46.5%). Blood pressure control increased from 64.5, 66.7, and 67 to 82.4, 85.1, and 83.1%.

Conclusions: The control indicators for all patients treated in the unit improved regardless of the treatment provided; however, patients who used the new drugs did not show any difference.

Keywords: Diabetes Mellitus, Pharmaceutical Preparations, Quality Indicators.

Biography: He was born in the state of Tlaxcala and completed his basic education in the same state. He finished his degree as a Surgeon Doctor in his hometown. He completed his medical specialization at the National Institute of Public Health and worked for the ISSSTE and IMSS. He currently serves as the head of epidemiological surveillance in a primary health care unit and is a lecturer for the Family Medicine and Epidemiology residencies.