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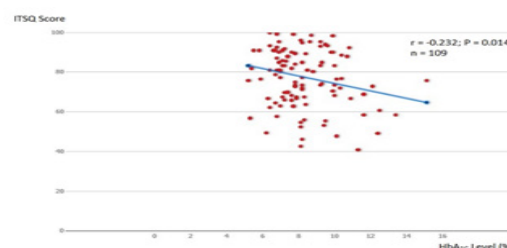
Glycemic Control among Ambulatory Patients with Type 2 Diabetes Mellitus on Insulin Therapy in a Tertiary Hospital

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Despite its established efficacy, insulin use remains underutilized. Together with a colleague, Carolina Jo, MD, we conducted a study to determine the prevalence of poor glycemic control among ambulatory type 2 diabetes mellitus patients on insulin, and to evaluate the correlations between insulin dose, diabetes duration, adverse effects, glycemic control and treatment satisfaction based on the Insulin Treatment Satisfaction Questionnaire (ITSQ) score. We performed a one-year cross-sectional study using consecutive sampling technique conducted at the clinics of endocrinologists / diabetologists in a tertiary hospital in the Philippines. Chi-square test was used for categorical data, two-sample independent

t-test for continuous data, Pearson's correlation coefficient (r) for correlation, and logistic regression for the prediction of outcome. Computations were made using Epi Info™ v7.1.4.0. Among 111 patients, 74.55% had poor glycemic control, 42.34% experienced hypoglycemia episodes and 46.85% gained weight since their last visit. Mean ITSQ score was 77.5 out of 100. Mean frequency of hypoglycemic episodes was 1.9 since last visit, and mean body weight change was +0.15 kg. The occurrence of hypoglycemia and weight gain did not differ between insulin regimens ($P=0.35$ and 0.31 , respectively). The frequency of daily insulin injections and the dosage of insulin correlated significantly with the frequency of hypoglycemia ($r=0.266$, $P=0.004$ and $r=0.33$, $P=0.0004$, respectively). Increased frequency of hypoglycemic episodes was associated with lower treatment satisfaction ($r=-0.241$, $P=0.01$). The frequency of daily insulin injections and ITSQ score were significantly correlated with good glycemic control ($OR=1.933$, $P=0.015$ and $OR=1.044$, $P=0.032$, respectively). In conclusion, the prevalence of poor glycemic control among ambulatory type 2 DM patients on insulin in our institution remains high. Treatment satisfaction and frequency of daily insulin injections correlated significantly with good glycemic control.



Scatter Plot of Correlation between HbA_{1c} Level and Insulin Treatment Satisfaction Questionnaire (ITSQ) Score

Publications

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4. Co JM, Villa M. Prevalence of malignancy in patients with 18F-Fluorodeoxyglucose Positron Emission Tomography-Positive Thyroid Incidentalomas. Philippine Journal of Internal Medicine 2009;47(2)
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Biography

Juan Maria Ibarra Co is a faculty member of the College of Medicine of the University of the East Ramon Magsaysay Memorial Medical Center, Philippines, and is the vice-chairman of the Department of Medicine at the same institution. He is currently the president of the Philippine Society for the Study of the Agine Male Foundation and the treasurer of the Philippine Association for the Study of Overweight and Obesity. He is also a host of UNTV's health education and advocacy program, Doctors on TV.

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