

Continuous Glucose Monitoring-Guided Insulin Dosing in Pump-Treated Patients with Type 1 Diabetes: A Clinical Guide

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Abstract

This article describes our methods for structured continuous glucose monitoring (CGM)-guided insulin dosing in pump-treated type 1 diabetes. Some of the methods have been reported and some are based on clinical experience. It is expected that this guide will help those involved in the care of such patients and who have experience with CGM to achieve better glucose control in their patients. More research needs to be done on insulin dosing and we hope that this article will also encourage others to pursue this field. This is a guide and, as such, is not meant to replace clinical judgment. Also, these dosing approaches apply only to those patients on pump therapy. They do not necessarily carry over to those patients treated with basal analog insulin.

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Abbreviations: (CF) correction factor, (CGM) continuous glucose monitoring, (CHO) carbohydrate, (HbA1c) hemoglobin A1c, (HCP) health care provider, (ICR) insulin to carbohydrate ratio, (MDI) multiple daily injections, (SMBG) self-monitoring of blood glucose, (TBD) total basal dose, (TDD) total daily dose, (T1DM) type 1 diabetes mellitus, (T2DM) type 2 diabetes mellitus

Keywords: dosing, continuous glucose monitoring, insulin pump, type 1 diabetes

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