

The Role of Self-Monitoring of Blood Glucose in Glucagon-Like Peptide-1-Based Treatment Approaches: A European Expert Recommendation

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Abstract

The role of glucagon-like peptide (GLP)-1-based treatment approaches for type 2 diabetes mellitus (T2DM) is increasing. Although self-monitoring of blood glucose (SMBG) has been performed in numerous studies on GLP-1 analogs and dipeptidyl peptidase-4 inhibitors, the potential role of SMBG in GLP-1-based treatment strategies has not been elaborated. The expert recommendation suggests individualized SMBG strategies in GLP-1-based treatment approaches and suggests simple and clinically applicable SMBG schemes. Potential benefits of SMBG in GLP-1-based treatment approaches are early assessment of treatment success or failure, timely modification of treatment, detection of hypoglycemic episodes, assessment of glucose excursions, and support of diabetes management and diabetes education. Its length and frequency should depend on the clinical setting and the quality of metabolic control. It is considered to play an important role for the optimization of diabetes management in T2DM patients treated with GLP-1-based approaches.

J Diabetes Sci Technol 2012;6(3):665-673

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Abbreviations: (DPP) dipeptidyl peptidase, (GLP) glucagon-like peptide, (HbA1c) glycosylated hemoglobin, (IDF) International Diabetes Federation, (NIT) non-insulin-treated, (SMBG) self-monitoring of blood glucose, (STeP) Structured Testing Protocol, (T2DM) type 2 diabetes mellitus

Keywords: diabetes, dipeptidyl peptidase-4 inhibitors, glucagon-like peptide-1 analogs, hypoglycemia, self-monitoring, treatment

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