Abstract

Current medical treatment of type 2 diabetes mellitus (T2DM) requires special attention to different comorbidities that often are associated with hyperglycemia, such as overweight or obesity, dyslipidemia, hypertension, microvascular or macrovascular complications, etc. The control of these factors risk to health is as important as the glucose control in diabetes type 2, it is essential for the antidiabetes drugs consider these risk factors. The consensus statement published by the ADA/EASD and AACE emphasizes that the potential effects of antidiabetes medications on CV risk factors besides hyperglycemia (ie, overweight/obesity, hypertension, and dyslipidemia) should be considered in pharmacotherapy selection. Since T2DM is a progressive disease with worsening HbA1C values over time, monotherapy, even with different agents, will eventually fail to maintain the glycemic target. Because insulin resistance occurs in a variety of organs and tissues, many patients may achieve fasting glycemic control but develop postprandial hyperglycemia. Other issues include the risk for hypoglycemia or weight gain with traditional glucose-lowering medications. The AACE/ACE algorithm for glycemic control is structured according to categories of HbA1C and suggests an HbA1C goal of 6.5%, although that may not be appropriate for all patients. The algorithm recommends monotherapy, dual therapy, or triple therapy based on initial HbA1C level of 6.5% to 7.5%, 7.6% to 9%, and >9% and reserves initiation of insulin therapy until treatment with oral or other injectable agents has failed. GLP-1 receptor agonists and DPP-4 inhibitors are novel options to improve glycemic control and reduce the incidence of weight gain. Combination therapy with newer and traditional agents improves glycemic control with a low incidence of hypoglycemia.

Keywords