

Control of postprandial hyperglycemia: How important is it in the prevention of diabetic complications

Anil K. Mandal¹ and Linda M. Hiebert²

¹University of Florida, USA

²University of Saskatchewan, Canada

Fasting blood glucose (FBG) >126 mg/dL (7mmol/L) and /or glycosylated hemoglobin (HbA1c) >6.5% have traditionally been used as a marker for the diagnosis of diabetes and initiation of a treatment plan. Despite the use of these diagnostic markers and a plethora of oral hypoglycemic agents, diabetic complications namely, cardiovascular disorders, renal failure and dialysis, and amputations, are on the rise. Therefore, a reasonable concern is that either the definition of diabetes or the prevalent therapy with oral hypoglycemic agents, or both, are faulty. Abundant literature is available regarding the importance of using 2-hour postprandial glucose (2hPPG) in glycemic control for the prevention of diabetic complications. A robust association has been shown between 1-h or 2-h postprandial hyperglycemia (>200 mg/dL: 11.1 mmol/L) and cardiovascular disorders and mortality. Notwithstanding the availability of such important information, 2hPPG control is still under-used in clinical practice of diabetes care.

This presentation is dedicated to redirecting the attention from using FBG and/or HbA1c to 2hPPG as a fundamental tool for evaluation of diabetes and to focus on therapy encompassing 2hPPG. Evidence has emerged from basic as well as clinical research claiming the importance of control of postprandial hyperglycemia in the prevention of diabetic complications. Prevention of diabetic complications is attainable by control of postprandial hyperglycemia with the prescription of a combination of Glargine insulin twice daily (12 hours apart) and treatment of glycemic excursions with fast-acting insulin.

Biography

Anil K. Mandal is a native of India and a naturalized citizen of the United States. He is board certified in Internal Medicine and Nephrology (kidney disease and hypertension). He is an author of a dozen books and more than 100 published articles on research in diabetes and kidney disease. He is a two-time Fulbright Scholar and a visiting professor in 23 countries that invited him to lecture on diabetes, high blood pressure, and kidney diseases.

amandal@med-spec.com