Glycemic control and weight gain: A critical balance and the impact of the new therapies

The prevalence of type 2 diabetes (T2D) is progressively increasing because of a concomitant rise in the prevalence of obesity. Globally, approximately 80% of people with T2D are overweight or obese. It is recommended that such individuals lose around 5-10% in order to improve glycemic control, as well as reduce their risk of other health conditions. Intentional weight loss in patients with T2D has been associated with a 25% reduction in total mortality and a 28% reduction in cardiovascular (CV) disease and diabetes mortality. Unfortunately, weight gain is the undesirable feature of several current antidiabetic treatments such as thiazolidinedione, sulphonylureas, and insulin, with an estimated 2-kg weight gain for every 1% decrease in HbA1c. Weight loss is especially challenging for individuals with T2D, who often experience a reduced response to weight-management pharmacotherapy compared with individuals without DM. The unique drug properties of GLP-1 agonists provide a safe and effective tool for both glucose control and weight loss in obese patients. Recent data among patients with T2D who were at high risk for CV events while they were taking standard therapy, those in the liraglutide group had lower rates of CV events and death from any cause than those in the placebo group. Sodium glucose co-transporter-2 (SGLT2) inhibitors, including empagliflozin, dapagliflozin and canagliflozin, are now widely approved anti-hyperglycemic therapies. Due to their unique glycosuric mechanism, SGLT2 inhibitors also reduce weight. According to the EMPA-REG OUTCOME results, SGLT2 inhibitors got prioritization in patients with T2D who have not achieved glycemic targets and who have prevalent atherosclerotic cardiovascular disease. When choosing glucose-lowering medications for overweight or obese patients with T2D, consideration of their effect on weight is essential. Whenever possible, minimize medications for comorbid conditions that are associated with weight gain.

Biography

Mahir Jallo is a Clinical Professor of Medicine and Senior Consultant Endocrinologist at the Gulf Medical University UAE. He has done his MB and ChB from Mosul Medical College, Iraq. He got his Arab Board Certificate (CABM) in Internal Medicine, and is certified with Diploma in Dyslipidemia from Boston University School of Medicine, USA. He is an Editorial Board Member for many international Diabetes and Endocrinology journals and Principle Investigator for many national and international clinical studies.

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