糖尿病血糖處置流程與降血糖藥物新知介紹

Update of management of hyperglycemia and new antidiabetic medications

李弘元

台大醫院內科部

According to DAROC Clinical Practice Guidelines for Diabetes Care- 2015, the treatment goals for adults with diabetes are fasting glucose 80-130 mg/dL, peak postprandial glucose <160mg/dL, and HbA1c<7.0%. The treatment goals should be individualized according to duration of diabetes, the presence of diabetic complications, risk of hypoglycemia and treatment-related side effect, life expectation, cognitive function, comorbidity, patient's attitude for glycemic control, family support, medical resource, and supporting systems. For all patients with diabetes, lifestyle modification is the first and an important way for glycemic control. For newly diagnosed type 2 diabetes patients or treated patients with HbA1c<9%, monotherapy, dual therapy, or insulin can be considered; for treated patients with HbA1c≥9%, combination therapy with two or more anti-diabetic drugs, or insulin is suggested. Metformin is the preferred anti-diabetic drug if not contraindicated. Besides, insulin secretagogues, thiazolidinedione, α -glucosidase inhibitors, DPP-IV inhibitors, SGLT-2 inhibitors, and insulin can also be considered as initial anti-diabetic agents. If target is not achieved, another class of anti-diabetic agent, GLP-1 receptor agonist, or insulin can be added. Among these anti-diabetic agents, this talk focus on new data about DPP-IV inhibitors and a new class of anti-diabetic agent, SGLT-2 inhibitor. Details for three cardiovascular safety studies for DPP-IV inhibitors, including SAVOR, EXAMINE, and TECOS, will be compared. SGLT-2 inhibitor can inhibit the reabsorption of glucose in filtered urine and reduce blood glucose concentrations. The advantages of SGLT-2 inhibitors include lower risk of hypoglycemia, body weight reduction, and blood pressure reduction. However, SGLT-2 inhibitor will increase the risk of urinary tract infection and genital tract infection. Empaglifozin, an SGLT-2 inhibitor, has been shown to reduce cardiovascular events and cardiovascular mortality.