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Guidelines

2018 consensus of the Taiwan Society of Cardiology and the Diabetes Association of Republic of China (Taiwan) on the pharmacological management of patients with type 2 diabetes and cardiovascular diseases

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Abstract

The global incidence and prevalence of type 2 diabetes have been escalating in recent decades. Patients with type 2 diabetes have an increased risk of atherosclerotic cardiovascular disease (ASCVD). About two-thirds of death in type 2 diabetes are due to ASCVD, including 40% from coronary heart disease (CHD), 15% from heart failure (HF), and 10% from stroke. The association between hyperglycemia and elevated CV risk has been demonstrated in multiple cohort studies. However, clinical trials of intensive glucose reduction did not significantly reduce macrovascular outcomes. It remains unclear whether the absence of demonstrable benefits is attributed to the inclusion of patients with far advanced ASCVD in whom a short treatment period is barely enough for CV protective effects to be shown, or complications associated with the treatment such as hypoglycemia hamper the beneficial effects to manifest, or simply glucose-lowering per se is ineffective.

Since the US FDA issued a mandate in December 2008 that every new anti-diabetic agent requires rigorous assessments of its CV safety, there have been more than 200,000 patients enrolled in a number of randomized controlled trials (RCTs), and around half of them have been completed and published. The results of these CV outcome trials are important for clinicians in their clinical practice, and also provide an opportunity for academic society to formulate treatment guidelines or consensus to provide specific recommendations for glucose control in various CV diseases.

The Taiwan Society of Cardiology (TSOC) and the Diabetes Association of Republic of China (DAROC), aiming to formulate a treatment consensus in type 2 diabetic patients with CVD, have appointed a jointed consensus group for the 2018 Consensus of TSOC/DAROC (Taiwan) on the Pharmacological Management of Patients with Type 2 Diabetes and CV Diseases. The consensus is comprised of 5 major parts: 1) Treatment of diabetes in patients with hypertension, 2) Treatment of diabetes in patients with CHD, 3) Treatment of diabetes in patients with stage 3 chronic kidney disease, 4) Treatment of diabetes in patients with a history of stroke, and 5) Treatment of diabetes in patients with HF. The members of the consensus group comprehensively reviewed all the evidence, mainly RCTs, and also included meta-analyses, cohort studies, and studies using claim data. The treatment targets of HbA1c were provided. The anti-diabetic agents were ranked according to their clinical evidence. The consensus is not mandatory. The final decision may need to be individualized and based on clinicians' discretion.

Keywords: Anti-diabetic agents; Chronic kidney disease; Coronary heart disease; Heart failure; Hypertension; Stroke; Type 2 diabetes

Contents

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