The Voice of the Editor-in-Chief

Dear Colleagues,

The 53rd European Association for the Study of Diabetes Annual Meeting (EASD 2017) was held on 11–15 September 2017 in Lisbon, Portugal. It was attended by around 15,000 physicians from around the world who had the opportunity to discuss and exchange experiences on key issues of contemporary diabetes. Many interesting reports presented during the Congress discussed, among others, epidemiology, new possibilities associated with molecular biology in the practical aspect of translation of basic sciences into daily clinical practice, the problem of obesity and related insulin resistance, vascular complications of diabetes and new therapies, especially in terms of cardiovascular risk. Due to the progressive nature of the disease and the gradual deterioration of pancreatic β-cell function, glycaemic control still remains difficult, which stimulates the search for new directions and optimal therapies. And it is the results of recent studies assessing new therapies, their effects on the optimization of metabolic control, the risk of hypoglycaemia and the primary and secondary prevention of cardiovascular complications, but also the cerebrovascular and renal protection, that raised the most interest and hope for the change of treatment philosophy. However, after previous promising data from the LEADER and SUSTAIN-6 studies, the results of the Exenatide Study of Cardiovascular Event Lowering (EXSCEL) with another GLP-1 agonist, exenatide, administered once a week were slightly disappointing. The study included 14,752 type 2 diabetic patients with median disease duration of about 12 years, of which 73.1% had a positive CVD history. It has been shown that exenatide does not increase cardiovascular risk, the risk of hospitalization due to heart failure or the risk of inflammation or pancreatic cancer. However, no significant reduction was found in primary endpoint defined as cardiovascular death, myocardial infarction, or non-fatal stroke (11.4% *vs.* 12.2%; HR = 0.91, p = 0.06) and the observed reduction in total mortality was not associated with a reduction in cardiovascular mortality. Thus, the question remains whether the GLP1 agonists differ in their ability of signal transmission and the biological effects exerted. Another interesting direction of research is the use of drugs that affect sodium-glucose cotransport, in combination with insulin, in type 1 diabetes. In the InTandem3 study (Study to Evaluate the Safety of Sotagliflozin in Patients With Type 1 Diabetes Who Have Inadequate Glycaemic Control With Insulin Therapy Alone) with sotagliflozin, a SGLT1/SGLT2 inhibitor, attention was paid to the potential benefits, but also threats, of such therapy associated with increased risk of ketoacidosis. Primary endpoint was HbA_{1c} < 7.0% after 24 weeks of follow-up without severe episodes of hypoglycaemia or diabetic ketoacidosis (DKA). This goal was achieved by significantly more patients in the sotagliflozin group — 29.6% *vs.* 15.8%, p < 0.001. Similar percentages of documented episodes of hypoglycaemia were observed in both groups, but the incidence of severe hypoglycaemia was significantly lower in the sotagliflozin group than in the control group (11.8% *vs.* 15.4% per patient-year of observation). Unfortunately, in the sotagliflozin group there were more cases of DKA (8.6% *vs*. 2.4%). The difference was higher among patients using personal insulin pumps compared to those on multiple injection regimen, suggesting that, at least in part, the cause was rather the device failure than the study drug itself. More encouraging, at this stage of research, were the results of observation in type 1 diabetes patients receiving dapagliflozin — the DEPICT-1 (Dapagliflozin Evaluation in Patients With Inadequately Controlled Type 1 Diabetes) study. In this study, the addition of dapagliflozin, regardless of the dose applied (5 or 10 mg), to insulin, when failed to be sufficiently effective, resulted in a significant reduction in HbA_{1c} [5 mg *vs*. placebo — 0.42% (p < .0001); 10 mg *vs*. placebo — 0.45% (p < .0001)], weight loss [5 mg *vs.* placebo — 2.96% (p < .0001); 10 mg *vs.* placebo — 3.72% (p < .0001)] and a decrease in the daily insulin requirement [5 mg *vs.* placebo — 8.8% (p < .0001); 10 mg *vs.* placebo — 13.2% (p < .0001)]. The percentage of hypoglycaemic episodes and adverse events, including DKA, was comparable between groups. Despite such promising results, the question remains whether the observed weight loss would be a desirable outcome

in type 1 diabetic patients with normal BMI, as well as a decrease in systolic BP in patients with low baseline values and, finally, if the reduction in insulin dose in a group of patients with low initial insulin requirement would be as safe as in the study. It is also important to precisely identify patients with type 1 diabetes who are particularly exposed to ketosis, when using the SGLT2 inhibitor in combination with insulin.

The current issue of "Clinical Diabetology", like the previous one, also includes interesting reports on diagnostic and therapeutic options that, I hope, will support your daily practice. I would like highlight again that medicine is still an art that often does not know easy ways or fully predictable solutions, and that diabetes treatment should always be of benefit to the patient.

Editor-in-Chief

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