Diabetes India 2022: 12th World Congress of DiabetesIndia

REDUCING CV RISK IN PEOPLE WITH DIABETES – SHOULD EVERYONE BE ON AN SGLT2 INHIBITOR?

Dr Miles Fisher, UK

Diabetologists prescribe sodium-glucose co-transporter 2 (SGLT2) inhibitors owing to their action on the kidney leading to a reduction in blood glucose by glycosuria along with the benefits such as the reduced risk of major adverse cardiovascular events (MACE), cardiovascular (CV) death, all-cause death, hospitalization for heart failure (HHF), etc. as proven by CANVAS, EMPA-REG and DECLARE-TIMI trials.

RSSDI-ESI clinical practice recommendations include the initiation of T2DM treatment with metformin along with lifestyle intervention. However, if glucose control is not achieved, dual or triple therapy is recommended based on the use of two or three oral antidiabetic agents such as sulfonylureas (SUs), glucagon-like peptide 1 (GLP-1), SGLT2 inhibitors, dipeptidyl peptidase 4 (DPP-4) inhibitors, etc.

Guidelines for diabetes management should be based on the level of cardiorenal risk rather than glycated hemoglobin (HbA1c).

PREVENTING DIABETES COMPLICATIONS – 100 YEARS ON FROM INSULIN: WHICH OF THE NEWER CLASSES WILL PREVAIL?

GLP1-RA

Prof (Dr) Aravinda J, Bengaluru

- To tackle the diabetes-related complications the need is to enroot the cause (hyperglycemia, obesity) effectively.
- GLP-1RA from many clinical trials has proven itself as a powerful agent targeting the core underlying causes. Its potential in reducing MACE and stroke is noticeable. How can we forget, how GLP-1 can improve metabolic derangement?

SGLT2 Inhibitors

Dr Purvi Chawla, Mumbai

- SGLT2 inhibitors: durable glycemic efficacy, body weight and blood pressure (BP) reduction with CV benefits and renoprotective action without a higher risk of hypoglycemia.
- These are multi-tasking, oral, inexpensive, anti-diabetic agents, here to stay.
- There is adequate guidance to use them in newly diagnosed patients, those with multiple risk factors, prior myocardial infarction, atherosclerotic cardiovascular disease (ASCVD), chronic kidney disease (CKD) and heart failure (reduced and preserved EF)-potentially in type 1 diabetes mellitus (T1DM), prediabetes.
- Body weight lowering (kg) with the highest approved doses of SGLT2 inhibitors and long-acting GLP-1 receptor agonist (GLP-1RA).
- CV outcomes in patients with type 2 diabetes (T2D) and cardiovascular disease (CVD) or high CV risk: SGLT2 inhibitors and GLP-1RAs show favorable effects on long-term CV outcome, only SGLT2 inhibitors have shown a benefit on HHF.
- In a meta-analysis of randomized controlled trials in patients with T2D and CVD or high CV risk: SGLT2 inhibitors showed a consistent beneficial effect on HHF not observed with GLP-1RAs.
- Real-world use of SGLT2 inhibitors was associated with a consistent reduction in HHF risk versus GLP-1RAs, in patients with T2D regardless of CVD status.
- Kidney outcomes in patients with T2DM and CVD or high CV risk: SGLT2 inhibitors have shown consistent kidney benefits, including slowing of estimated glomerular filtration rate (eGFR) decline and reduction of hard kidney outcomes. All SGLT2 inhibitors but not all GLP-1RAs have demonstrated benefit in slowing eGFR decline over time when compared with placebo in patients with T2DM and CVD or high CV risk.
- The risk-benefit ratio has always to be assessed before prescribing.
- Adequate counseling for urinary tract infections, genitourinary infections and appropriate hydration should always be done. It is not to be used in contraindicated patient subgroups.

RELEVANCE OF REMIX INSULIN IN INDIAN PRACTICE

Dr Rakesh Sahay, Hyderabad

- A significant contribution from postprandial plasma glucose (PPG) even at higher HbA1c in the Indian population as compared to Caucasians.
- Premix insulins are simple to start with a single injection with effective HbA1c control targeting both PPG and fasting plasma glucose.
- Patients uncontrolled on 2 or more oral antidiabetic drugs (OADs) with flexible lifestyles can be started on premix insulin and the dose can be titrated on a weekly basis.
- Premix insulin provides convenience and simplicity at initiation, titration and intensification. Premix insulin provides both convenience and efficacy to the patient and contributes a long way to achieving the patient's glycemic target.

PREVENTION OF DIABETES PANDEMIC – HOPE AND SCOPE

Prof (Dr) V Seshiah, Chennai

Exposure to a diabetic environment *in utero* is associated with increased occurrence of impaired glucose tolerance and a defective insulin secretory response in adult offspring independent of genetic predisposition to T2D.

A blood test may identify gestational diabetes risk in the first trimester. The National Institutes of Health (NIH) analysis suggests early screening could allow for lifestyle changes before the condition develops.

The influence of pre-pregnancy metabolic changes on fetal development may be mediated through modification of oocyte metabolism, predominantly of their mitochondria, through changing early embryonic growth and later growth trajectories.

Primordial prevention: Ideally peak maternal post-prandial blood glucose should be ~110 mg/dL from the preconception period but never cross 12 mg/dL at any time.

What is needed for primordial prevention?

- It is essential to take timely action from "Preconception care to confinement".
- It is important to screen all pregnant women for glucose intolerance in the first trimester (ideal 9th to 10th weeks).
- Achieving euglycemia in them ensures adequate maternal nutrition and maintains ideal body weight.
- Steps to prevent in all probability, small for gestational age and large for gestational age who are prone to develop diabetes.

EFFECT OF REMOGLIFLOZIN ON GLYCEMIC VARIABILITY: "REMIT-GV TRIAL"

Prof (Dr) Jayant Kumar Panda, Cuttack

- In monitoring, glycemic variability is proven as a very accurate measure in accessing glycemic control.
- Remogliflozin is the latest SGLT2 inhibitor with a very attractive profile.
- REMIT-GV trial shows round the clock good glycemic control with remogliflozin.
- We can use this molecule for the overall benefit of our patients including cardiac and renal outcomes.

SULFONYLUREA IN 2022: STILL STANDING TALL!

Dr SR Aravind, Bengaluru

- The role of modern SUs in the T2DM continuum:
  - Newly diagnosed
  - Uncontrolled or high HbA1c
  - Obese/overweight, with CVD/HF, with CKD
  - Elderly/high risk of hypoglycemia or long-standing T2DM or on insulin.
- All 4 gliptin trials showed CV safety but no CV benefits.
- Severe hypoglycemia and weight gain were negligible with the gliclazide-based strategy.
- SUs lower blood glucose.
- Giving too much is a problem, so we need to be cautious and careful in dosing.
- HbA1c reduction with SUs are the best among OADs and next only to insulin.

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