Abstract:

Sulfonylureas (Sus) have been a cornerstone in the management of Type II diabetes for decades. Addition of SUs has been the gold standard combination therapy in patients who fail to achieve target glycemic control as monotherapy with metformin alone or as first line monotherapy in few patients. They have well-established efficacy and safety profile and are the most commonly recommended class of agents when glycemic targets are not achieved with metformin alone. The selection of SUs should be highly individualized with careful monitoring in high-risk patients as there are disparity in pharmacokinetic and pharmacodynamic profile between different SUs themselves which results in variable safety and tolerability. Focus on newer SUs and concerns about the risk of severe hypoglycemia and weight gain with some SUs have led to discussion on their safety and utility. It has to be borne in mind that the adverse events associated with SUs should not be ascribed to the whole class, as many modern SUs are preferred over older SUs in diabetic patients due to low risk of hypoglycemia, CV neutrality and weight-neutral effects along with lower treatment cost without compromising the glycemic efficacy and tolerability hence providing a good compliance rate. Thus, modern SUs are positioned as the front-line agent in the management of T2DM. The current guidelines, developed by experts from Africa, Asia, and the Middle East, promote the safe and smart use of SUs in combination with other glucose-lowering drugs.

Keywords: Gliclazide, glimepiride, sulfonylureas, type 2 diabetes

Recent publications:

1.Kalra S, Aamir AH, Raza A, Das AK, Azad Khan AK, Shrestha D, *et al.* Place of sulfonylureas in the management of type 2 diabetes mellitus in south Asia: A consensus statement. Indian J Endocrinol Metab 2015; 19:577-96.

2. Truter I. An investigation into antidiabetic medication prescribing in South Africa. J Clin Pharm Ther 1998; 23:417-22.

3. Chiang CW, Chiu HF, Chen CY, Wu HL, Yang CY. Trends in the use of oral antidiabetic drugs by outpatients in Taiwan: 1997-2003. J Clin Pharm Ther 2006; 31:73-82.

4. Ashcroft FM, Gribble FM. Tissue-specific effects of sulfonylureas: Lessons from studies of cloned K(ATP) channels. J Diabetes Complications 2000; 14:192-6.

5. Matthews DR, Charbonnel BH, Hanefeld M, Brunetti P, Schernthaner G.Long-term therapy with addition of pioglitazone to metformin compared with the addition of gliclazide to metformin in patients with type 2 diabetes: A randomized, comparative study. Diabetes Metab Res Rev 2005; 21:167-74.

Biography:



Dr Khalid is a Senior Diabetologist and specialist Physician in Internal Medicine, with a keen interest in research and real-world practice in the field of diabetes. Having completed his Bachelor's degree of MBBS in 1989, he went on to do Post graduate diploma in Endocrine from University of South Wales UK and a Masters in Diabetes from Cardiff University UK. He has achieved more than 30 years of clinical practice with over 20 publications in international journals. He was also an external reviewer in developing guidelines on Insulin Therapy in Diabetes for the East African Diabetes Study Group and is also on editorial board and reviewer for many National and International journals.

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