

Sulphonylurea safety questioned

Phung OJ, Schwartzman E, Allen RW, et al.

Sulphonylureas and risk of cardiovascular disease: systematic review and meta-analysis.

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Sulphonylurea (SU) drugs are amongst the oldest oral hypoglycaemic agents (OHA) available, and are in very widespread use all over the world. They do have their problems however – notably weight gain and hypoglycaemia. It has also been recently understood that they do not have as good ‘glycaemic durability’ as some other OHAs, with initial improvement in glycaemia, often to be followed by escape from control after 18 to 24 months. What is less well known is that a potential association with increased risk of cardiovascular disease has been questioned for many years. Researchers in the USA have recently reported the results of a wide literature search on the topic, analysed by systemic review and meta-analysis. The analysis was of 33 separate studies including over 1.3 million patients, followed for periods ranging from 0.5 to 10.5 years. Sulphonylurea use was associated with an excess risk of cardiovascular death – relative risk (RR) 1.27. There was also an increase in all cardiovascular events (RR 1.10). In those studies in which SU treatment was compared with metformin, the RRs were 1.26 and 1.18 respectively. This large analysis therefore supports earlier concerns that SU use in type 2 diabetes is associated with a small but significant increase in cardiovascular events and mortality. The researchers do point out that the reason for the association is uncertain, and that the trials analysed were often very variable in design and duration of follow-up. Sulphonylurea use is already declining in many parts of Europe, since the introduction of incretin-based therapies. Alternatives to SU are not, however, as common in Africa. Nevertheless, atherosclerotic vascular disease is less common in Africa, compared to Western countries, so it may be that the SU risks described in this article are less of a problem in African diabetic populations.

Metformin and gestational diabetes

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Metformin effects on treatment satisfaction and quality of life in gestational diabetes.

Brit J Diab Vasc Dis 2013; 13: 178-82

It is now established that the oral hypoglycaemic agents, metformin and glibenclamide, can be used to treat gestational diabetes mellitus (GDM), and that the traditional ‘perceived wisdom’ of always using insulin when diet fails, is wrong and unnecessary. It is of interest that the original observational work supporting the use of these drugs comes from Africa (Cape Town in South Africa). The safety profile for glibenclamide in GDM is not as well established as for metformin, but the latter drug is certainly safe and effective. Unfortunately, this knowledge is not widespread, and many African patients with GDM are not being offered this drug as second-line

therapy when diet alone has failed. A recent UK study has compared life quality and patient satisfaction in three groups with GDM, treated with either metformin (n = 68), insulin (n = 32), or insulin plus metformin (n = 28). The results showed that both life quality and satisfaction scores were highest in the metformin-alone group, compared with the other two groups. This study shows that as well as metformin being an effective drug in GDM, it is accepted and appreciated by patients. Compared with insulin, metformin is also a considerably cheaper and safer alternative. The advantages in resource-limited areas of Africa are obvious, and metformin deserves to be much more widely used in GDM.

Affordable diabetes care

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Optimal diabetes care – can we afford it? Evidence-based diabetes care could be highly cost-effective.

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Diabetes care is expensive all over the world. In the UK, for example, diabetes consumes over 10% of the total health care budget. With ever-expanding available drugs to treat the disease, as well as new insulins, it is often hard to see how increasing costs can be controlled. Two UK diabetologists have recently suggested that many recent expensive ‘advances’ are lacking in a firm evidence-base, and that by applying strict evidence-based principles, diabetes care can become affordable. Some of the issues raised are as follows:

- **Insulin use.** Analogue insulins are at least three times the cost of standard human insulins, and have no firm evidence base in type 2 diabetes.
- **Self-glucose monitoring.** Self-glucose monitoring is helpful in those with type 1 diabetes, but is greatly over-used in type 2 diabetes, where it should be reserved for those on insulin.
- **New type 2 drugs.** An increasing number of new classes of agents for treating type 2 diabetes have been introduced over the last 10 years or so. Though some appear useful, their long-term benefits are uncertain, and side-effect issues have arisen with some (e.g. the withdrawal of rosiglitazone). Such new drugs should be used cautiously.
- **Improve in-patient care.** In the UK, over 15% of hospital beds are occupied by patients with diabetes. There is evidence that early specialist input reduces their length of stay, saving considerable costs.
- **Intensive glycaemic control.** In type 2 diabetes, tight glucose control has some microvascular benefits, but no clear benefits in reducing cardiovascular outcomes. Control of hypertension and hyperlipidaemia, as well as smoking cessation, will have more effect on such outcomes.
- **Diabetes prevention.** Type 2 diabetes is a preventable disease, both on a population and individual basis. Lifestyle intervention needs to be fully supported at government level.