

Journal club: Back to basics – an update on lifestyle factors, preventing gestational diabetes and sulfonylureas

Readers will be familiar with my stance on the early use of polypharmacy for patients with type 2 diabetes. This includes statins and ACE inhibitors (or ARBs), as has been recommended for several years, and now, with the updated NICE NG28 guideline on type 2 diabetes management, it is clear that SGLT2 inhibitors should be considered for all patients with a QRISK score of >10%, chronic kidney disease or heart failure. Essentially, if the patient is on a statin (and hence would almost certainly have a QRISK score >10%), then they should also be considered for treatment with an evidence-based SGLT2 inhibitor.

But clinical care is much more complex than the employment of effective medications alone. We should always consider lifestyle factors, and several recently published papers are worth reading for the clinical messages they suggest. In the UK Biobank study, more than 502 000 people in the general population attended one of 22 assessment centres across England, Wales and Scotland between 2006 and 2010. Various demographic, clinical and investigational data were gathered and the participants were followed up prospectively. In an analysis by [Boonpor et al](#) (2023), the risk of type 2 diabetes was higher in people whose walking pace was slow. Irrespective of walking pace, men and women with obesity, central obesity or high body fat percentage had at least a seven-fold increase in risk of developing type 2 diabetes compared to those with normal levels of adiposity; however, the risk was up to 18 times higher in those with obesity and slow walking pace. This increase was found to be independent of sociodemographic characteristics. Promoting brisk walking as a weight management and fitness improvement measure might be an effective part of a type 2

diabetes prevention strategy.

Another UK Biobank study ([Sun et al, 2023](#)) assessed the validity of the American Heart Association's approach to lifestyle using "Life's Essential 8", a cardiovascular risk score based on four health behaviours (diet, physical activity, nicotine use and sleep) and four health factors (BMI, non-HDL cholesterol, blood glucose and blood pressure). The cardiovascular health (CVH) score, with a maximum of 100, was categorised into low, moderate and high groups. Premature death was defined as death before the age of 75 years. The authors found that the adverse cardiovascular effects of type 2 diabetes could be offset by having a high CVH score compared with a low score. The most important single adverse lifestyle factor was increased BMI, both in people with and without type 2 diabetes. Additionally, an abnormal lipid profile was particularly important in participants with type 2 diabetes. Benefits of a high CVH score included a lower risk of premature death, with an increased lifespan.

Meanwhile, a study by [Lloyd et al](#) (2023), concluded that routine implementation of a structured lifestyle intervention during pregnancy was highly cost-effective in reducing new cases of gestational diabetes. This was based on a Markov model and would have the potential to reduce cases of gestational diabetes and future type 2 diabetes by at least 10%, with beneficial finances based on return on investment analyses.

A knight's move to another important clinical topic, finally. The sulfonylureas are one group of drugs that we are understandably using less of, owing to risk of hypoglycaemia and the fact that newer agents are so effective at reducing heart failure, CVD and renal outcomes. However, a



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study by [Wang et al](#) (2023), from the Scottish Diabetes Research Network Epidemiology Group, showed that second-generation sulfonylureas, such as gliclazide, are unlikely to increase cardiovascular risk or all-cause mortality. Their potent efficacy and microvascular benefits strongly suggest that these agents should remain as part of the global armamentarium in managing diabetes.

To conclude, lifestyle intervention works and we have to persist in our endeavours to implement this more difficult aspect of our overall management. We need to be informed at all times by research evidence when it comes to both medications and lifestyle advice. ■

Boonpor J, Parra-Soto S, Gore J et al (2023) Association between walking pace and incident type 2 diabetes by adiposity level: A prospective cohort study from the UK Biobank. *Diabetes Obes Metab* **25**: 1900–10

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Sun Y, Yu Y, Zhang K (2023) Association between Life’s Essential 8 score and risk of premature mortality in people with and without type 2 diabetes: A prospective cohort study. *Diabetes Metab Res Rev* **39**: e3636

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