European Association for the Study of Diabetes
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Increasing exercise reduces all-cause death in type 2 diabetes

Increasing physical activity reduces risk of cardiovascular death by almost two-thirds in people with type 2 diabetes, according to a Swedish study.

Researchers recorded leisure-time physical activity in more than 19 000 adults aged 30–72 years with type 2 diabetes from the Swedish National Diabetes Register. Over 5 years of follow-up results showed that people who took regular exercise (3–7 times weekly) had a 34% lower risk of fatal cardiovascular disease and 29% lower all-cause mortality than those with low activity levels (no regular exercise or only once weekly).

People who did little physical activity at baseline but who increased exercise to at least three times a week showed even more striking reduction in cardiovascular risk compared to those who continued to take little exercise (68% reduction in fatal cardiovascular disease, 65% reduction in all-cause mortality).

Lead author Dr Björn Zethelius from Uppsala University, Sweden, said, 'What this study shows is that it's never too late to increase your physical activity. Even when you are on medication, if you increase your physical activity, you will lower your risk for cardiovascular diseases.'

Around 1800 patients moved from a low exercise category into a more physically active group during the course of the study.

Susan Mayor

Patients need individualized care to avoid hypoglycaemia

More than half of type 2 diabetes patients taking part in an international survey reported having had symptoms of hypoglycaemia at least once but only around one-third said they had discussed low blood sugar during routine check-ups with their physician.

The online survey interviewed 899 adults with type 2 diabetes from around the world: Australia, China, Germany, India, Mexico, Saudi Arabia, the United Arab Emirates and the UK. Results showed that individual lifestyle factors that can affect diabetes control, including work and cultural influences were not always addressed in diabetes check-ups.

Just over three-quarters (76%) of patients did not recall discussing their occupation and working hours and 83% said they had not talked about cultural factors that might affect their blood glucose control, such as fasting.

Lack of understanding about factors that can reduce blood sugar may put patients with type 2 diabetes at increased risk factor for hypoglycaemic episodes.

The survey showed that 53% of patients said they had experienced symptoms of low blood sugar at least once but only 37% had discussed management of hypoglycaemia during routine check-ups; 28% said their physician had never talked to them about symptoms of low blood sugar and 6% were unsure about the topic.

'Patients and physicians need to discuss factors that can impact blood sugar control,' said Dr Wasim Hanif, consultant physician at University Hospital Birmingham, and chair of the committee that led the survey, which was supported by MSD. 'A patient with diabetes who works night shifts or who fasts for religious reasons needs a different treatment plan than a patient who is retired or who works days.'

Susan Mayor

Dr Wasim Hanif, Consultant Physician, University Hospital Birmingham, Birmingham

Comparing sulphonylureas and sitagliptin in older patients

Sitagliptin (Januvia, MSD) provides similar glycaemic improvement but with less hypoglycaemia compared to sulphonylurea treatment in elderly patients with type 2 diabetes, show results reported at the meeting.

Researchers carried out a post-hoc analysis pooling data from three double-blind clinical studies for patients with type 2 diabetes aged 65 years and older treated with sitagliptin (100 mg/day) or a sulphonylurea (glipizide or glimepiride in titrated doses). They compared blood glucose reductions and rates of hypoglycaemia with the two treatments.

Results showed that elderly patients taking sitagliptin (n=178) achieved the same reduction in mean glycosylated haemoglobin (HbA_{1c}) – 7.5% from baseline – as patients taking a sulphonylurea (n=195; mean HbA_{1c} reduction 7.5%). But four times as many patients on an sulphonylurea experienced one or more episodes of symptomatic hypoglycaemia (28.2%) than those on sitagliptin (6.2%).

'The general effects of aging complicate the treatment of diabetes in the elderly. In particular, hypoglycaemia is of greater concern in this population and may lead to dizziness and accidents or falls, which are more likely to be dangerous in the elderly,' said Dr Barry Goldstein, Therapeutic Area Head in Diabetes and Endocrinology with Merck Research Laboratories. 'Therefore, careful consideration of treatment options for older patients is important,' he added.

Susan Mayor