IN BRIEF

RESEARCH HIGHLIGHTS

DIABETES

Long-term modification of lifestyle, such as dietary habits and physical activity, has a substantial effect on stroke incidence in patients with type 2 diabetes mellitus, according to the Japanese Diabetes Complications Study. Researchers from the University of Tsukuba, Japan, randomly allocated 2,033 men and women aged 40–70 years with type 2 diabetes mellitus to receive standard care with or without education on lifestyle intervention. No difference was found in cardiovascular risk factors.

Original article Sone, H. *et al.* Long-term lifestyle intervention lowers the incidence of stroke in Japanese patients with type 2 diabetes: a nationwide multicentre randomised controlled trial (the Japan Diabetes Complications Study). *Diabetologia* **53**, 419–428 (2010)

The risk of progression of renal disease in patients with type 1 diabetes mellitus is increased by abnormal lipid profiles, in particular high triglyceride levels. A Finnish prospective cohort study of 2,034 adults with type 1 diabetes mellitus, who were followed for a mean 5.4 years, showed that incident microalbuminuria could be predicted by high levels of triglycerides, apolipoprotein B, apolipoprotein A-II and HDL3 cholesterol. Triglycerides and apolipoprotein B concentrations also predicted the progression to macroalbuminuria.

Original article Tolonen, N. et al. Lipid abnormalities predict progression of renal disease in patients with type 1 diabetes. *Diabetologia* 52, 2522–2530 (2009)

Nocturnal intermittent hypoxia (as a marker of obstructive sleep apnea) is associated with an increased risk of developing type 2 diabetes mellitus. Researchers of the Circulatory Risk in Communities Study (CIRCS) assessed nocturnal intermittent hypoxia by pulse oximetry in 4,398 Japanese aged 40–69 years. The multivariable-adjusted hazard ratio for developing type 2 diabetes mellitus was highest for individuals with moderate to severe nocturnal intermittent hypoxia.

Original article Muraki, I. et al. Nocturnal intermittent hypoxia and the development of type 2 diabetes: the Circulatory Risk in Communities Study (CIRCS). Diabetologia 53, 481–488 (2010)

Questionnaires were completed by 2,062 adolescents with type 1 diabetes mellitus, their parents and their health-care teams in 21 international centers, to evaluate glycemic targets set by health-care professionals, their perception by adolescents and parents and their influence on metabolic control. HbA_{1c} levels were measured centrally. The self-reported glycemic targets set by adolescents and their parents, as well as those set by health-care professionals and actual metabolic outcome correlated strongly.

Original article Swift, P. et al. Target setting in intensive insulin management is associated with metabolic control: the Hvidoere Childhood Diabetes Study Group Centre Differences Study 2005. *Pediatr. Diabetes* doi:10.1111/ j.1399-5448.2009.00596.x