

Our panel of experts highlight the most important research articles across the spectrum of topics relevant to the field of diabetes management



Shazli Azmi*

Ardestani A, Rhoads D, Tavakkoli A. Insulin cessation and diabetes remission after bariatric surgery in adults with insulin-treated Type 2 diabetes. *Diabetes Care* 38(4), 659–664 (2015).

Ardestani *et al.* studied 3318 patients who underwent Roux-en-Y gastric bypass surgery (RYGB) and 1907 that had laparoscopic adjustable gastric banding (LAGB) with Type 2 Diabetes Mellitus (T2D) and were on insulin presurgery. They report that the proportion of insulin cessation in the RYGB was approximately twice that of the LAGB group in all four time points assessed after surgery, 1, 3, 6 and 12 months. Additionally, clinical remission of T2D was greater in the RYGB versus LAGB at all postoperative time points; 1 month (22.5 vs 7%), 3 months (34.4 vs 11.3%), 6 months (43.2 vs 16%) and 12 months (50.3 vs 19.3%). Weight loss was also greater in the RYGB-treated patients at all time points. Multiple regression analysis revealed that RYGB was a strong predictor of postoperative cessation of insulin therapy. Younger age and weight loss were weaker predictors of insulin cessation during the early stages.

This study shows that even in subjects described as having ‘advanced diabetes’, based on the use of insulin therapy, may benefit from RYGB through remission of T2D. If this does not occur they may have cessation of insulin therapy. A limitation of the study is that the HbA1C, duration of diabetes, fasting blood glucose or dose of insulin was not assessed in

the database used. This meant that the authors evaluated diabetes remission through a categorical clinical evaluation scale to assess diabetes severity.

- Written by Shazli Azmi

Malik M, Govan L, Petrie JR, *et al.* Ethnicity and risk of cardiovascular disease (CVD): 4.8 year follow-up of patients with Type 2 diabetes living in Scotland. *Diabetologia* 58(4), 716–725 (2015).

Cardiovascular disease (CVD) is the most common cause of death in T2D. While south Asians are at increased risk of CVD, they are often considered as one group despite the ethnic differences in risk of CVD in south Asian countries. Malik *et al.* undertook a population-based longitudinal study of 121,535 from the Scottish Care information – Diabetes and followed them up for 4.8 ± 2.3 years. 13.4% of patients developed CVD (ischemic heart or cerebrovascular disease).

They report that Pakistani ethnicity is an independent risk factor for CVD among people with T2D. The risk of CVD was increased in Pakistanis after adjustment for age and sex (hazard ratio: 1.31 [95% CI: 1.17–1.47]; $p < 0.001$) compared with Whites. At baseline, these groups were found to be younger, have earlier onset of T2D with longer duration, higher HbA1C and a lower blood pressure, BMI, creatinine, proportion of smokers and proportion on antihypertensive treatment than Whites.

*Core Technology Facility, Centre for Diabetes & Endocrinology, Institute of Human Development, University of Manchester, 46 Grafton Street, Manchester M13 9NT, UK; shazli.azmi@manchester.ac.uk

CVD risk was found to be reduced in the Chinese population (hazard ratio: 0.66 [CI: 0.47, 0.92]; $p = 0.014$). However, there were notably fewer patients in this group ($n = 387$) compared with Pakistani ($n = 2250$) and Whites ($n = 111,461$). They suggest that the development of programs designed to target Pakistanis to help prevent or delay the onset of diabetes are important.

- Written by Shazli Azmi

Financial & competing interests disclosure

The authors have no relevant affiliations or financial involvement with any organization or entity with a financial interest in or financial conflict with the subject matter or materials discussed in the manuscript. This includes employment, consultancies, honoraria, stock ownership or options, expert testimony, grants or patents received or pending, or royalties.

No writing assistance was utilized in the production of this manuscript.