

Type 2 diabetes in young adults in Central Auckland: demography and complications

Type 2 diabetes (T2D) in young adults is associated with a high risk of diabetes complications. The authors of this report have investigated the demography and the emergence of complications of young adults with T2D in the central Auckland region where there has been substantial immigration.

Three hundred and ten young adults with T2D were registered with the Auckland Diabetes Centre in 2015. Demographic, anthropometric, metabolic variables and the prevalence and emergence of complications were evaluated.

It was concluded that new migrants, New Zealand-born Pāsifika and patients with mental illness or an intellectual disability comprise the bulk of young onset T2D. The disease is aggressive, and by the age of 40, patients are already developing advanced complications.

Internal Medicine Journal 2018; 48:67–73

Continuous glucose monitoring in pregnant women with type 1 diabetes

Pregnant women with type 1 diabetes are a high-risk population who are recommended to strive for optimal glucose control, but neonatal outcomes attributed to maternal hyperglycaemia remain suboptimal.

In this international multicentre trial, the researchers' aim was to examine the effectiveness of continuous glucose monitoring (CGM) on maternal glucose control and obstetric and neonatal health outcomes.

Three hundred and twenty-five appropriate patients who were pregnant or planning pregnancy were randomised to CGM and routine capillary glucose monitoring or to capillary glucose monitoring without CGM.

The researchers report that use of CGM during pregnancy in patients with type 1 diabetes is associated with improved neonatal outcomes, which are likely to be attributed to reduced exposure to maternal hyperglycaemia. CGM should be offered to all pregnant women with type 1 diabetes using intensive insulin therapy.

Lancet 2017; 390:2347–59

Oxygen therapy in suspected acute myocardial infarction

Oxygen has been used routinely in the treatment of patients with suspected acute myocardial infarction and is recommended in clinical guidelines. However, the clinical effect of routine oxygen therapy in patients with suspected acute myocardial infarction who do not have hypoxemia at baseline is uncertain.

This Swedish study reviews this matter. Six thousand six hundred and twenty-nine patients with suspected myocardial infarction and oxygen saturation of 90% or higher were randomly assigned to receive either supplemental oxygen (six litres per minute for six to 12 hours, delivered through an open face mask) or ambient air. All-cause mortality at one year was 5% in the oxygen cohort and 5.1% in the ambient air group. Readmission rates for another infarction were similar.

Routine use of supplemental oxygen in patients with suspected myocardial infarction who did not have hypoxemia was not found to reduce one-year all-cause mortality.

N Engl J Med 2017; 377:1240–9

URL:

<http://www.nzma.org.nz/journal/read-the-journal/all-issues/2010-2019/2018/vol-131-no-1470-23-february-2018/7506>
