SAND abstract No. 92 from the BEACH program 2005–06

Subject: Prevalence of metabolic syndrome

Organisations supporting this study: Merck Sharp and Dohme (Australia) Pty Ltd and the Australian General Practice Statistics and Classification Centre (AGPSCC)

Issues: Prevalence of metabolic syndrome (as defined by the International Diabetes Federation) among patients attending Australian general practice.

Sample: 5,594 patient encounters from 193 GPs; data collection period: 20/9/2005 – 28/11/2005.

Method: Detailed in the paper entitled 'SAND Method 2005–06'on the website: <www.fmrc.org.au/publications/SAND_abstracts.htm>.

Methods for this study: Metabolic syndrome is defined by the International Diabetes Federation (IDF) as central obesity plus two or more of four factors: i) raised triglycerides or treatment for this lipid abnormality, ii) raised blood pressure or treatment for hypertension, iii) raised fasting plasma glucose or previously diagnosed type 2 diabetes and iv) reduced HDL cholesterol or treatment for this lipid abnormality. Central obesity is defined according to IDF as waist circumference ≥94cm for Europid men and ≥80cm for Europid women, with ethnicity specific values for other groups.

Summary of results

The age-sex distribution of respondents was similar to the distribution for all BEACH (general practice) encounters, with the majority (58.8%) of patients being female.

The prevalence of central obesity in this general practice patient group was 43.7% (95% CI: 41.1–46.4). Central obesity rates did not differ between male and female patients (42.0% and 45.2% respectively).

Just under one third (29.6%) of respondents with central obesity had raised triglycerides (≥150mg/dL (1.7mmol/L)) or specific treatment for this lipid abnormality. Significantly more male patients had raised triglycerides or lipid treatment (34.5%) than females (26.5%).

Close to half (46.1%) of the respondents had raised blood pressure (≥130/85 mmHg) or treatment for previously diagnosed hypertension.

One-quarter (24.1%) of the respondents had raised fasting plasma glucose (≥100mg/dL (5.6mmol/L)) or previously diagnosed type 2 diabetes. Significantly more male patients had raised fasting plasma glucose (27.7%) than females (21.7%).

One-quarter (24.1%) of respondents had reduced HDL cholesterol (<40mg/dl (1.03mmol/L) for males or <50mg/dl (1.29mmol/L) for females) or specific treatment for this lipid abnormality. Significantly more male patients had reduced HDL cholesterol or lipid treatment (29.3%) then females (20.8%).

Of all 5,402 general practice patients surveyed, 842 (15.6%, 95% CI: 14.0-17.2) had metabolic syndrome, while 3,845 (71.2%) did not meet the IDF definition for metabolic syndrome. A further 715 (13.2%) had not been tested for enough of the four metabolic syndrome factors to be classified.

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