Prevalence of cardiometabolic risk factors among Malaysian obese adults

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Introduction: Obese adults are associated with increased cardiometabolic risk (CMR). The study aims to investigate the prevalence of CMR factor abnormalities in obese adults in Kuantan. Methods: Seventy-six obese adults with a mean (standard deviation) age of 33.7 years (9.8 years) participated in this study. All participants had a waist circumference (WC) measured, blood pressure (BP) taken, and assessment of fasting blood glucose (FBG), lipid profile (LP) and high-sensitivity C-reactive protein (hs-CRP) level. Results: For CMR factors, the mean values for WC was 97.2 ± 9.6 cm, mean overall BP was 119 ± 15/76 ± 11 mmHg, mean FBG level was 4.8 ± 0.5 mmol/L and the mean of total cholesterol (TC) and triglyceride (TG) was 5.4 ± 1.0 mmol/L and 1.4 ± 0.7 mmol/L, respectively. Lastly, the mean of hs-CRP was 6.0 ± 6.1 mg/L. The CMR factors with the highest prevalence of abnormal values included WC (male 100%; female 98%) and TC (male 73.1%; female 52%) for both genders, systolic BP (50%) and TG level (61.5%) for male, and hs-CRP level (68%) for female. Out of the nine CMR factors measured, five CMR risk factors were shown to have a high prevalence of abnormalities. Conclusions: The present study suggests that obese adults in Kuantan have multiple CMR factor abnormalities. A larger trial, sensibly informed of this trial, can now build upon and confirm these results.

KEYWORDS: obesity, adults, cardiometabolic risk factors