Prevalence and association between triglyceride level and lifestyle factors among Malay obese class I and II adults

Objective: Hypertriglyceridemia is an independent risk factor for cardiovascular diseases. This study aimed to determine the prevalence and association of triglyceride level and lifestyle factors among Malay obese class I and II adults. Method: This is a cross-sectional study of 65 Malay obese class I and II adults aged 20-62 years (21 male, 44 female) from sub-urban areas of Malaysia. Overnight fasting venous blood samples were obtained to determine the triglyceride level (mmol/L). Subjects were classified into either normal or elevated triglyceride level groups based on the triglyceride level (normal < 1.6 mmol/L, elevated > 1.7 mmol/L). Unhealthy lifestyle behaviors, defined as smoking status, hours per day spent on sitting passively and sitting with active motion, and the amount of saturated fat, mono-unsaturated and polyunsaturated fat from dietary intake, were measured from 24-h dietary intake and physical activity recall. We compare the variables of unhealthy lifestyle behaviors between subjects with normal and elevated triglyceride level using independent samples t-test. Results: Among 65 obese class I and II adults, 16 subjects (24.6%) were found to have elevated triglyceride levels (mean ± standard deviation of body mass index 31.89 ± 3.29 kg/m²). There are significant differences between subjects having normal and elevated triglyceride level with gender, marital status, the number of children, smoking status, weight and monounsaturated fat intake (all P-values <.05). Conclusions: The findings of this study highlighted elevated triglyceride level in obese adults might be influenced by unhealthy lifestyle behaviors. We suggest that lifestyle modification intervention is appropriate to prevent cardiovascular disease among Malay obese class I and II adults.

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