Abstract

The dyslipidemia associated with excess weight is a risk profile global call for cardiovascular disease (CVD). The aim of this study was to investigate the association between dyslipidemias and other risk factors for cardiovascular diseases (CVD) in adolescents, considering sexual maturation. A cross-sectional study was carried out with 432 adolescents from public schools, aged 10-19 years. The correlations between the variables from the lipid profile and the Body Mass Index (BMI), waist circumference (WC), waist-to-height ratio (WHtR), sexual maturation, familial history and maternal education were evaluated using Pearson's correlation coefficient. Low high-density lipoprotein cholesterol (HDL-C) was the most prevalent dyslipidemia (50.5%), regardless of gender. There were significant correlations between triglycerides and BMI ($r = 0.30$, $p < 0.01$), WC ($r = 0.32$, $p < 0.01$) and WHtR ($r = 0.33$, $p < 0.01$). The linear model, which took into consideration sexual maturation, age and BMI, explain about 1 to 10.4% of the lipid profile variation. The low HDL-c was the most prevalent dyslipidemia in all adolescents and hypertriglyceridemia was most prevalent in overweight adolescents. Associations between dyslipidemias and anthropometric indicators (BMI and RCA) detected in this study can generate the hypothesis of the risk factors for CVD in adolescents.

Keywords

Dyslipidemias, Obesity, Risk factors.