Abstract P19

Correlation of Body Mass Index and Lipid Profile in Young Adult

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Objectives: Obesity, the primary risk factor for noncommunicable diseases, can be determined by calculating the body mass index. This condition is linked with extensive processes of adipocyte hyperplasia and hypertrophy caused by weight gain as a result of overnutrition and inadequate energy expenditure. These alterations in adipose tissue composition are linked to decreased adipokine production and the development of adipose tissue dysfunction, which is responsible for obesity-related metabolic disorders.

Methods: This is a cross-sectional study involving 123 healthy volunteers with various BMIs. Data collection was carried out using interview techniques and then examined for BMI. The level of lipid serum was examined from venous blood.

Results: From a total of 123 subjects, 97 people (78.8%) were male and 26 people (21.1%) were female. The mean age (SD) was 25.91 ± 6.04 years. The quantity of data collected as well as the of abnormal BMI, TC, TG, HDL-C, and -C variables, which are 82 (66.7%), 46 (37.4%),36 (29.3%), 42 (34.1%), and 76 (61.8%), respectively. The correlation between BMI and TG ($r=0.201, p=0.026$), LDL-C ($r=0.242, p=0.007$), and LDL-C/HDL-C ratio ($r=0.429, p=0.001$). Correlation between BMI and HDL-C ($r=-0.430, p=0.001$).

Conclusion: There is a significant correlation between obesity and certain components of the lipid profile.

Keywords: body mass index, dyslipidemia, lipid profile, obesity

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