using Cockroft-Gault equation. Correlation between blood lipid profiles and renal function was statistically analyzed by Pearson test.

Result: The samples included 137 T2DM patients (76 male subjects and 51 female subjects) with mean age (62±11.35) years old. Mean of eGFR was 76±27.03 mL/min/1.73 m^2. The laboratory result of tot-Chol was 203±49.09 mg/dL, triglyceride was 186±163.56 mg/dL, LDL-Chol was 123±41.79 mg/dL, HDL-Chol was 47±13.55 mg/dL. There was no significant correlation between tot-Chol, triglyceride, LDL-Chol, HDL-Chol and renal function (p = 0.816; p = 0.869; p = 0.957 and p = 0.082, respectively).

Conclusion: In our study, there was no correlation between lipid profiles and renal function in patients with T2DM.

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CORRELATION BETWEEN LIPID PROFILES AND BODY MASS INDEX IN PATIENTS WITH TYPE II DIABETES MELLITUS

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Background: Epidemiological studies have shown that Asians are more likely to have obesity measured in terms of increased body mass index (BMI). Increased body fats are related to increased insulin resistance and may account for the increased prevalence of type 2 diabetes mellitus (T2DM) in Asians. Prior epidemiologic studies also have shown that increasing BMI is associated with higher total cholesterol, triglyceride and low-density lipoprotein cholesterol (LDL-Chol). However, these studies were limited by underrepresentation of obese subjects. Although obesity in people is more common among countries with high economic standards, its prevalence is growing rapidly in developing countries including Indonesia. With the increasing trend of prevalence of obesity and its risk factors in adult and since obesity is related with cardiovascular diseases (CVD), much attention has been given to obesity in Indonesia. Hyperlipidaemias are common in patients with diabetes and further increase the risk of ischaemic heart disease, especially in T2DM. Detection and control of hyperlipidaemia can reduce myocardial infarction, coronary deaths, and overall mortality. Indeed, even when LDL-Chol concentration is normal or slightly raised in T2DM (the major abnormalities being low HDL cholesterol and high triglyceride concentrations), the LDL-Chol particles may be qualitatively different and more atherogenic than those in non-diabetic patients. Aim of this study is to determine correlation between blood lipid profiles and BMI of patients with T2DM in Surabaya.

Method: This was a cross sectional analytical study which has enrolled patients with T2DM who were on routine follow up in private diabetic clinic. Body mass index (BMI) and blood lipid profiles (total cholesterol (tot-chol, LDL-Chol, triglyceride) were measured. Correlation between BMI and blood lipid profiles was statistically analyzed by Pearson test.

Result: The samples included 137 T2DM patients (76 males and 51 females) with mean age 62±11.35 years, mean BMI 27.56±3.8 kg/m^2. The laboratory result of tot-chol was 203±49.09 mg/dL, triglyceride was 186±163.56 mg/dL, LDL-Chol was 123±41.79 mg/dL. The triglyceride, LDL level increased with increasing BMI (p = 0.044; p = 0.016 respectively), but there was no significant correlation between tot-chol versus body mass index (p = 0.255).

Conclusion: There was a significant correlation between BMI with triglyceride and LDL-Chol, but not with tot-chol in patients with T2DM.

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DETECTION OF TYPE 2 DIABETES MELLITUS IN MEDICAL STUDENTS

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Background: Diabetes Mellitus (DM) is a leading cause of morbidity and mortality in developing countries like India. DM comprises a group of common metabolic disorders and is characterized by a state of chronic hyperglycemia due to defective production or action of insulin.

Unfortunately more than 50% of the diabetic patients in India remain unaware of their diabetic status, which increases the risk of development of diabetic complications in them. Hence early identification of the risk factors associated with diabetes and appropriate interventions aimed at preventing the onset of diabetes and its complications are urgently required.

According to World Health Organisation, a disease of the middle-aged and elderly, type 2 diabetes has recently escalated in all age groups and is now being identified in younger and younger age groups, including adolescents and children, especially in high-risk population. This underscores the need for mass awareness and screening programmes to detect diabetes at an early stage and early age. So purpose of the study is to find risk of type 2 diabetes mellitus at an early age using IDRS. To assess Random Capillary Blood Glucose (RCBG) in students having high IDRS score.

Method: All the students of Bharati Vidyapeeth Deemed University Medical College will be screened using IDRS which includes age, family history of diabetes, exercise status and Waist circumference. After scoring them they will be categorised into mild, moderate and high risk group. In students who are having score more than 50, Random Capillary Blood Glucose (RCBG) will be assessed with the help of glucometer.

Result: We have assessed 403 students till now. It was observed that 9%, 36% & 55% students are in High, Moderate & Low risk group respectively for developing type 2 DM. Mean abdominal obesity in high risk students was 98.19±10.42 as compared to 78.52±12.25 in moderate and low risk students (p < 0.0001). Family history of diabetes in either or both parents was present in 28% students. 72% students were having sedentary lifestyle. Mean RCBG in students having score more than 50 was 95.10±11.63 mg/dl. Also, 4 students were having RCBG >103 mg/dl.

Conclusion: This underscores the need for further investigations to detect diabetes at an early stage and to overcome the disease burden of diabetes in future. IDRS is the simplest way to screen large population. Also, RCBG is a simple and practicable test which can be used to predict the risk of type 2 diabetes mellitus. To prevent and to postpone the risk of type 2 diabetes mellitus, health education programme, exercise and diet planning can be recommended for these students.

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