

A comparison of glycemic control and Lipid profile among patients of diabetic dyslipidemia and type 2 diabetes mellitus in Pakistani population

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Background:

Diabetes Mellitus is a metabolic syndrome, which is characterized by hyperglycemia due to relative or absolute decrease in insulin. It accompanies several metabolic complications, poor production of insulin and clearance of lipoprotein. Dyslipidemia is one of these complications of type 2 diabetes mellitus, it is linked with atherosclerosis. Deranged lipid profile is caused by insulin resistance. The importance of glycemic control in patients with T2DM to reduce the risk of micro-vascular and macro-vascular complications is well established and widely recognized by current clinical guidelines, as American Diabetes Association (ADA) and European Association for the Study of Diabetes (EASD). Poor glycemic control and hypertension are the predictors of dyslipidemia in type 2 diabetes mellitus. In T2DM, exchange of cholesterol between LDL and HDL by the help of cholesterol ester transfer protein is increased. Material & Methods: The study was conducted at multi-disciplinary lab, Army Medical College, National University of Medical Sciences, Rawalpindi, after approval of ethical review committee. It was a cross-sectional comparative study. The study technique was non-probability sampling. Duration of the study was two years. Total 300 subjects were divided in three groups; each group contains 100 subjects. World Health Organization (WHO) diagnostic criteria were used for diagnosis of patients. Blood lipid profile was quantified by measuring absorbance in spectrophotometer. The present study is based on exploring the effects of dyslipidemia in patients of type 2 diabetes mellitus as compare to normal healthy controls. Results: The ANOVA test was applied for comparing means. Mean \pm SD value between the groups has been found out by the help of Post Hoc Tukey test. Lipid profile was found to be statistically significant between the three groups. Conclusion: BSF, HbA1c, lipid profile and BMI were found to be statistically significant among the three groups. It was also seen that BSF, HbA1c and lipid profile were also statistically significant among diabetics and dyslipidemic patients as compare to normal healthy controls.

Recent Publications

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□ Omer A, Arif M, Arif T, Ahmed O. Effect of immediate versus standard physiotherapy treatment in post micro-discectomy. European journal of scientific exploration 2019;2(5):1-5.

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Biography

Maria Arif is a PhD scholar at National University of Medical Sciences, Islamabad, Pakistan. She is serving at National University of Sciences and Technology, Islamabad, Pakistan. She is a new emerging scientist in Biochemistry field. She is a PhD trainee at Army medical college, Rawalpindi, Pakistan.

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