Title: Effects of Perceived Psychological Stress on Serum Lipid Concentrations

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Abstract: Introduction: While there is substantial evidence that psychological stress enhances risk for coronary artery disease, the mechanisms underlying such an influence remain unclear. Several studies have shown that acute stress can raise plasma lipid levels, but there is any study on perceived stress and lipid profiles. Therefore, we examined the relationship between perceived psychological stresses (one month ago stress) and serum lipid levels in type 2 diabetic patients.

Methods: Two hundred type 2 diabetic patients, aged (30-75), were assigned to this descriptive study. For measuring perceived stress score, perceived stress questionnaire (PSQ) was filled out for all participants. HDL-c, triglycerides (TG), total cholesterol (TC), and LDL-c concentrations in the patients were 202.20±36.01 mg/dl, 201.20±26.01 mg/dl, 39.20±7.8 mg/dl and 122.01±36.01 mg/dl, respectively. The mean perceived stress score was 12.58±5.26. Significantly positive association was found among negative perceived stress and triglyceride ($p<0.01, r=0.53$), total cholesterol ($p<0.01, r=0.33$) levels. However, positive perceived stress inversely related with significantly lower triglyceride levels ($p<0.01, r=0.4$). There was no significant association among perceived stress and HDL-c and LDL-c concentrations.

Conclusions: These results suggested that perceived stress level may have adverse effects on cardiovascular disease through increasing serum total cholesterol and triglyceride concentration, and are the first to examine in that lipid status to perceived stress in Iran. Therefore stressful life may be attributing in diabetes chronic complications so decrease quality of life in this patients.

type 2 diabetes, lipid profile, perceived stress

Presentation: Poster