# PO334 Correlation Between Lipid Profiles And Renal Function In Patients With Type 2 Diabetes Mellitus

by Sony Wibisono

Submission date: 18-Feb-2021 05:20AM (UTC+0800)

**Submission ID:** 1511775820 **File name:** C-21.pdf (8.62K)

Word count: 403

Character count: 2333

#### PO334

### CORRELATION BETWEEN LIPID PROFILES AND RENAL FUNCTION IN PATIENTS WITH TYPE 2 DIABETES MELLITUS

S. Murtiwi<sup>1</sup>, A. Tjokroprawiro<sup>1</sup>, D. Pramudya<sup>1</sup>, A. Pranoto<sup>1</sup>, A. Sutjahjo<sup>1</sup>, S. Adi<sup>1</sup>, S. Wibisono<sup>1</sup>. <sup>1</sup>Surabaya Diabetes and Nutrition Center, Surabaya, Indonesia

Background: Chronic Kidney Disease (CKD) is accompanied by characteristic abnormalities of lipid metabolism, which appear as a consequence of nephrotic syndrome or renal insufficiency and are reflected in an altered apolipoprotein profile as well as elevated plasma lipid levels. Experimental and clinical studies have suggested a correlation between the progression of renal disease and dyslipidemia. The underlying pathophysiologic mechanisms for the relationship between lipid levels and progression of renal disease are not yet fully understood, although there are data that oxidative stress and insulin resistance may mediate the lipid-induced renal damage (lipotoxicity). Dyslipidemia is an established cardiovascular (CV) risk factor in the general population. In CKD, however, epidemiologic studies and clinical trials have raised uncertainties regarding the impact of dyslipidemia on clinical outcomes and, consequently, the optimal lipid profile. The increased risk of atherosclerosis in type 2 diabetes mellitus (T2DM) consists of multiple factors. Diabetes-related changes in plasma lipid levels are among the key factors that are amenable to intervention. The spectrum of dyslipidemia in T2DM can include all the various types of dyslipidemia identified in the general population. We studied the relationship between the lipid profile, estimated glomerular filtration rate (eGFR) in patients with T2DM.

**Method:** This was a cross sectional analytical study which has enrolled patients with T2DM who were on routine follow up in private diabetic clinic). Renal function (eGFR) and and blood lipid profiles [total cholesterol (tot-Chol) LDL-Chol, HDL-Chol, triglyceride] was measured. Renal function was measured 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  $(62\pm11.35)$  years old. Mean of eGFR was  $76\pm27.03$  mL/min/1.73m2. The laboratory result of tot-Chol was  $203\pm49.09$  mg/dL, triglyceride was  $186\pm163.56$  mg/dL, LDL-Chol was  $123\pm41.79$  mg/dL, HDL-Chol was  $47\pm13.55$  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.

## PO334 Correlation Between Lipid Profiles And Renal Function In Patients With Type 2 Diabetes Mellitus

**ORIGINALITY REPORT** 

13%

0%

13%

0%

SIMILARITY INDEX

INTERNET SOURCES

**PUBLICATIONS** 

STUDENT PAPERS

### **PRIMARY SOURCES**



Gijs M.J.M. Welten, Michel Chonchol, Sanne E. Hoeks, Olaf Schouten et al. "Statin therapy is associated with improved outcomes in vascular surgery patients with renal impairment", American Heart Journal, 2007

**7**%

Publication



"Abstracts of the IDF Congress in Paris 2003", Diabetologia, 2003

6%

Publication

Exclude quotes

Off

Exclude matches

< 10 words

Exclude bibliography

On