

## Relationship between uric acid and lipid profiles in patients with type 2 diabetes

Departments of Internal Medicine, Daegu Fatima Hospital, Daegu, Korea

\*Bi-Na Jeong, Eui-Hyun Kim, Hyun-Ae Seo

**Aims:** Uric acid is known to associate with stroke, coronary artery disease and metabolic syndrome. Some epidemiologic research suggested that high uric acid level is connected with dyslipidemia. However, this relationship was not studied in type 2 diabetic patients. The aim of this study was to investigate the association between serum uric acid level and lipid profiles in type 2 diabetic patients. **Methods:** A total of 972 type 2 diabetes patients were included in the present study. We measured height, body weight, blood pressure and biochemical parameters. Lipid profiles included low density lipoprotein (LDL), high density lipoprotein (HDL), triglyceride (TG) and total cholesterol (TC). **Results:** The mean age of total subjects was  $56.90 \pm 13.91$  and men were 507 (52.2%). The mean body mass index (BMI) was  $23.89 \pm 3.88$ . In the univariate analysis, TG and uric acid level was significantly positively correlated ( $r = -0.155$ ,  $p < 0.001$ ). The negative connection between HDL and uric acid was persisted (beta coefficient =  $-0.111$ ,  $p = 0.001$ ). **Conclusions:** In the present study, we found that serum uric acid levels is significantly positively associated with TG, whereas serum HDL cholesterol levels are significantly inversely associated in type 2 diabetic patients. Management for hyperuricemia may help control dyslipidemia in patients with type 2 diabetes.

## Health-related quality of life in elderly population with diabetes mellitus.

Department of Internal Medicine, Chung-Ang University College of Medicine

\*HongYeul Lee, Hyun Min Kim, Jaetaek Kim

**Objective:** This study aimed to investigate the relationship between diabetes mellitus and health-related quality of life (HRQoL) in elderly population, furthermore, the impact of comorbidities and glycemic control level on HRQoL in elderly patients with diabetes. **Methods:** Data from the 5th Korean National Health and Nutrition Examination Survey (KNHANES) of 2010-2012 were used in this study. Presence of comorbidities including hypertension, dyslipidemia, cardiovascular diseases, chronic kidney disease, chronic liver disease, chronic lung disease, and various types of cancer were analyzed. EuroQol 5D index score (EQ-5D) was used for assessment of health-related quality of life. Logistic regressions were used to explore determinants for the lowest quintile HRQoL scales in the diabetes group. **Results:** A total of 4742 subjects over 65 years of age (2031 men and 2711 women; mean age  $72.9 \pm 5.7$  years) were included. Prevalence of diabetes mellitus was 22.7%, and prediabetes was 34.3% in this population. The mean EQ-5D score was lower in the diabetes group ( $0.84 \pm 0.19$ ) than the others ( $0.86 \pm 0.18$ ,  $p = 0.001$ ). The patients with diabetes had more comorbidities ( $1.73 \pm 1.23$ ) compared to those with normal glucose or prediabetes ( $1.09 \pm 1.16$ ,  $1.42 \pm 1.20$ , respectively). Among the 1076 patients with diabetes, EQ-5D score was associated with the numbers of comorbidities, however, there was no relationship with HbA1c level and EQ-5D score. In logistic analysis, age (OR 1.1, 95% CI, 1.1 to 1.2), male gender (OR 1.9, 95% CI, 1.3 to 2.8), and number of comorbidities (OR 1.4, 95% CI, 1.2 to 1.7) were associated with poor HRQoL, in contrast, HbA1c level, duration of diabetes, BMI, and treatment modality did not affect the HRQoL. **Conclusions:** Diabetes was associated with impaired HRQoL and multiple comorbidities in elderly population. Furthermore, in the elderly diabetic patients, glycemic control status was not associated with HRQoL, the degree of comorbid conditions was an important factor for defining HRQoL.