fatty liver disease. However, data on the use of aminotransferases to monitor change in hepatosteatotic state are lacking.

Methods 394 participants, aged 63–79 years, from the Edinburgh Type 2 Diabetes Study, a large, randomly-selected population of patients with Type 2 diabetes, were assessed on two occasions approximately 3 years apart. Liver ultrasonography was undertaken and both plasma alanine aminotransferase (ALT) and aspartateaminotransferase (AST)) were measured. Hepatic steatosis was graded as either "normal", "mild" or "moderate/severe" according to findings on ultrasound. Change in steatosis was classified as either regression or progression by 1 or 2 categories. ANOVA (with trend) analysis was used to assess the association between change in steatosis and change in aminotransferase levels.

Results Mean follow-up was 2.7 years. 5.1% (n=20) of participants regressed two categories, 14.7% (n=58) regressed one category, 60.7% (n=239) showed no change, 12.4% (n=49) progressed one category and 7.1% (n=28) progressed two categories. There was a statistically significant linear trend for both ALT and AST ($F(4,3)=4.76$, p=0.03 and $F(4,3)=10.70$, p=0.01 respectively) indicating that as the hepatosteatosis stage changed the aminotransferase level increased or decreased proportionally.

Conclusion In a relatively large sample of patients with type 2 diabetes representative of patients with type 2 diabetes in general, we have shown that change in aminotransferase levels are proportionally associated with change in levels of hepatosteatosis. This suggests that aminotransferases may be useful in monitoring progression of steatosis.

P2-202 THIAZOLIDINEDIONES ARE ASSOCIATED WITH REGRESSION OF HEPATOSTEATOSIS IN PEOPLE WITH TYPE 2 DIABETES: THE EDINBURGH TYPE 2 DIABETES STUDY

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Background Increasing evidence suggests that some antidiabetic medications may improve markers of abnormal liver structure and function in people with non-alcoholic fatty liver disease. We investigated this association in older people with type 2 diabetes.

Methods 474 participants, aged 63–79 years, from the Edinburgh Type 2 Diabetes Study, a large, randomly-selected population of patients with Type 2 diabetes, underwent assessment on two occasions. At baseline, liver ultrasonography was undertaken and antidiabetic medications (metformin, sulphonyureas and thiazolidinediones) were recorded. Liver ultrasonography was repeated approximately 3 years later. Hepatosteatosis was graded as either normal or "fatty", and the change between examinations as regression, no change or progression. χ^2 for trend was used to analyse the association.

Results Mean follow-up was 2.7 years. 9.5% (n=45) of participants progressed, 13.9% (n=66) regressed and 76.6% (n=363) remained the same. Thiazolidinedione use was significantly higher among participants whose hepatosteatosis regressed (5.0%, 11% and 19.7% in participants with progression, no change and regression respectively, p=0.02). Similar figures for metformin use were 55.0%, 67.0% and 67.2% respectively (p=0.28) and for sulphonyurea use were 15.0%, 34.9% and 31.1% respectively (p=0.19).

Conclusion In a large sample of patients with type 2 diabetes representative of patients with type 2 diabetes in general, thiazolidinedione use was associated with regression of hepatosteatosis. This is consistent with emerging evidence from clinical trials suggesting that there may be a role for thiazolidinediones beyond glucose control in patients with type 2 diabetes. Further analyses are warranted to explore the potential mechanism underlying this association.

P2-203 ASSOCIATION OF VITAMIN D AND CARDIOMETABOLIC RISK FACTORS AMONG A MALAY COHORT IN KUALA LUMPUR, MALAYSIA

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Introduction Epidemiologic studies suggest that vitamin D (25-hydroxyvitamin D) is inversely associated with metabolic syndrome in the western populations. However, evidence from Asian population is limited. The present study was conducted to investigate the association of vitamin D and cardiometabolic risk factors among an existing Malay cohort in Kuala Lumpur.

Methods This is an analytical cross sectional study. A total of 380 subjects were sampled. Their vitamin D status, fasting blood glucose, full lipid profile, blood pressure, weight, height and waist circumference were measured.

Results There were more (58%) female respondents. Their mean age was 48.5±5.2 years. The prevalence of Metabolic Syndrome was 37.0% while the mean vitamin D level was 44.5 (95% CI 42.6 to 46.4) nmol/l. Females had significantly lower mean vitamin D level (36.3; 95% CI 34.5 to 38.0 nmol/l) compared to males (56.1; 95% CI 53.2 to 59.2 nmol/l). Respondents with low (cut off at 50 nmol/l) vitamin D level had 2.63 (95% CI 1.58 to 4.36) times odds of having abdominal obesity. Low vitamin D levels were associated with higher odds of low HDL-lipoprotein (OR: 1.26; 95% CI 0.70 to 2.27), high fasting blood glucose (OR: 1.22; 95% CI 0.70 to 2.12), abnormal/high triglyceride (OR: 1.46; 95% CI 0.87 to 2.47) and abnormal systolic and/or diastolic blood pressure (OR: 1.43; 95% CI 0.85 to 2.38). Respondents with lower vitamin D levels had higher odds for Metabolic Syndrome (OR: 1.70; 95% CI 1.01 to 2.89).

Conclusion Our results concur with those from the West where vitamin D deficiencies are associated with cardiometabolic risk factors.

P2-204 ASSOCIATION OF BODY MASS INDEX AND HEALTH-RELATED QUALITY OF LIFE IN HIGH-RISK CARDIOVASCULAR PATIENTS

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Introduction Apart from clinical events, health-related quality (HRQoL) is an important outcome in high-risk cardiovascular patients. As body mass index has been associated with clinical events ("obesity paradox"), we investigated the relationship between body mass index and health-related quality of life.

Methods Patients were included with hypercholesterolaemia and an indication for statin therapy in 1961 primary care practices. HRQoL was assessed with the Short Form (SF)-12 health status instrument at baseline, after 6 and after 12 months. Physicians assessed patient body mass index (BMI). A mixed-effects regression model accounting for the three measurement points was used to investigate (a) the association between BMI and HRQoL at baseline, and (b) the association between change in BMI and change in HRQoL.

Results A total of 5082 patients (2165 females) were included. The mean change in BMI within 12 months was 0.05 (SD: 1.11) kg/m^2.