

P073

The grade of nonalcoholic fatty liver disease is an independent risk factor for gallstone disease

Young-Kyu KIM, Kyu Hee HER*

Surgery, Jeju National University Hospital, Korea

Introduction : There are some reports about association between nonalcoholic fatty liver disease (NAFLD) and gallstone disease (GD) because of sharing risk factors. However, there is no report about an association between grades of NAFLD and GD. Therefore, the aim of this study was to know whether grade of NAFLD could be an independent risk factor affecting GD in a Korean population.

Methods : This study enrolled a total of 7,886 subjects who completed a questionnaire and underwent ultrasound and medical checkup at the Health Promotion Center of Jeju National University Hospital in Korea from January 2009 to December 2017. Grade of fatty liver and presence of gallstones were investigated by abdominal ultrasound. The body Mass index, biochemical parameters were checked, and age, metabolic syndrome and sex were collected based on their medical records. Univariate and multivariate analyses were performed to identify risk factors affecting GD.

Results : The estimated prevalence of NAFLD and GD were 40.5% and 4.5% respectively. In the univariate analysis, risk factors affecting GD were the age, NAFLD, metabolic syndrome, fasting blood glucose, high density lipoprotein (HDL)-cholesterol, aspartate aminotransferase, alanine aminotransferase. In the multivariate logistic regression analysis, independent risk factors were older age and higher grade of NAFLD.

Conclusions : Older age and higher grade of NAFLD are independent risk factors affecting GD. There is a strong correlation between grade of NAFLD on abdominal ultrasonography and GD.

Corresponding Author. : **Kyu Hee HER** (kh-her@hanmail.net)