Is Helicobacter pylori infection a risk factor for the development of Nonalcoholic fatty liver disease?

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Helicobacter pylori (HP) infection is a major risk factor of gastric diseases including gastric ulcer and cancer. However, it is still controversial whether HP infection can affect other disease in different organ such as non-alcoholic fatty liver disease (NAFLD). Several studies from different regions of the world have described the conflicting results in association between HP infection and NAFLD. We conducted a retrospective study in 3663 South Korean patients to determine whether HP infection confers a higher risk of NAFLD. Enrolled participants were classified as HP positive or negative group according to 13C urea breath tests. NAFLD was defined using the Hepatic Steatosis Index (HSI) and NAFLD liver fat score (NAFLD-LFS). Those with an HSI >36 or NAFLD-LFS > -0.640 were considered to have NAFLD. Multivariable logistic regression was performed to identify risk factors for NAFLD. Among 3663 patients, 1636 (44.7%) were HP positive. HSI showed significant difference between HP positive and negative subjects (P=0.005), but NAFLD-LSF was not significant between both groups. In conclusion, HP infection is not a risk factor for NAFLD as indicated by HSI or NAFLD-LFS. However, because there are several clinical studies showing positive results in association between HP infection and NAFLD, further investigation of prospective, large-scale studies including liver biopsies are required.

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