Validation of western Helicobacter pylori IgG antibody assays in Korean adults.

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Abstract

Helicobacter pylori infection is endemic in Korea, and serology testing is widely performed. The aim of this study was to validate and compare the diagnostic accuracy of Korean and Western serological assays for H. pylori detection in Korean adults. The 114 Korean adults who visited our centre over a 6-month period for the evaluation of H. pylori infection using the urea breath test (UBT) were enrolled in this prospective study. Anti-H. pylori IgG was measured using three commercially available immunoassays: Genedia H. pylori ELISA (Green Cross Medical Science), Chorus helicobacter IgG (DIESSE Diagnostica Senese) and Vidas H. pylori IgG (bioMérieux). Positive UBT findings were obtained in 40.6% of included subjects. The sensitivities and the specificities of Vidas, Chorus and Genedia were 89.7%, 100% and 100% and 85.5%, 75.4% and 80.7%, respectively. We found no differences in sensitivity between the Vidas and Chorus (P=0.125) and Vidas and Genedia (P=1.000) assays. There were also no differences in specificity between the Vidas and Chorus (P=0.070), Chorus and Genedia (P=0.508) and Vidas and Genedia (P=0.549) assays. In Korean adults, the Genedia H. pylori ELISA, Chorus helicobacter IgG and Vidas H. pylori IgG assays exhibited a high concurrence rate with similar diagnostic accuracy. Thus, both the Korean and Western non-invasive assays are reliable for serodiagnosis of H. pylori in Korean individuals