Diagnostic Value of Helicobacter Pylory Stool Antigen Test in the diagnosis of Helicobacter Pylory in Ardabil

Abstract

Background: *Helicobacter pylori infection is an important factor involved in the development of gastroduodenal disease. a diagnosis of Helicobacter pylori infection can be made by invasive or non-invasive methods. Invasive techniques require endoscopic examination which is expensive and inconvenient and may cause complications. Stool antigen test is noninvasive and accessible diagnostic module for Helicobacter pylori infection.*

Aim*:to evaluate diagnostic value of Helicobacter pylori stool antigen test in the diagnosis of Helicobacter pylori in Ardabil***.**

Methods and meterials*: The study was cross-sectional. 150 people aged 35 to 69 years in Ardabil were randomly included in the study. The subjects underwent urease breath test (gold standard) and stool antigen test. Sensitivity, specificity, positive and negative predictive value of stool antigen test were calculated compared to breath test.*

Results*: 150 subjects including 58 males (38.7%) and 92 females (61.3%) with a mean age of 48.7±8.1 years participated in the study. Urease breath test was positive in 99 patients (66%) and negative in 51 patients (34%). Sensitivity, specificity, positive predictive value, negative predictive value, and accuracy of stool antigen test compared to breath test were 95.9%, 96.1%, 97.9%, 92.5%, and 95.9%, respectively. The agreement of stool antigen test with breath test was high (K=0.911, P<0.001).*

Conclusion: *The results of the study showed a high agreement between stool antigen test and breath test in diagnosing Helicobacter pylori infection. Therefore, it seems that stool antigen test, as a simpler, faster, and less expensive method, can be used with high confidence instead of breath test in the diagnosis of Helicobacter pylori infection.*

Keywords: *Stool antigen test, Helicobacter pylori, diagnostic value.*