Value of Rapid Urease Test in the Detection of Helicobacter pylori Infections

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Background & Objectives: Current diagnostic methods for detecting *Helicobacter pylori* infection include rapid urease test (RUT), urea breath test (UBT), histology, culture, and serum antibody detection. RUT is the most commonly used biopsy-based Methods to diagnose Helicobacter pylori infection because of its simple, rapid and accurate characters. The aim of this study is evaluation of rapid urease test compared with PCR for diagnosis of *Helicobacter pylori* .

Methods: 94 consecutive patients with dyspeptic symptoms attending the endoscopy suite of gastroenterology section of Firouzgar University Hospital, Tehran, Iran, were enrolled. Patients antrum biopsy specimens were collected at endoscopy for the rapid urease test and PCR. data was recorded in a data sheet and analyzed using SPSS, ver19.0. Sensitivity, specificity, positive predictive value (PPV), negative predictive value (NPV) of RUT were compared against PCR. The gold standard test for the diagnosis of *H. pylori* infection was PCR.

Results: Sensitivity, specificity, positive predictive value (PPV), negative predictive value (NPV) of RUT respectively were 97.2%, 89.2%, 81.4% and 98%.

Conclusion: RUT has high sensitivity and specificity for detection of *Helicobacter pylori* infection

Keywords: *Helicobacter pylori*; Rapid Urease Test; PCR; Biopsy