

Original Paper

Comprasion of urease test with Giemsa staining for detection of *Helicobacter pylori* infection in patients with gastric ulcer and gastritis

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Abstract

Background and Objective: *Helicobacter pylori* are one of the most common gastrointestinal bacterium infections. This study was done to compare the urease test with Giemsa staining to detection of *Helicobacter pylori* infection in patients with gastric ulcer and gastritis.

Methods: This descriptive – analytic study was conducted on 601 patients' diagnosed with gastric ulcer and gastritis, whom under went endoscopy in 5th Azar hospital, Gorgan, Iran during 2008-12. Rapid urease test was immediately taken during endoscopy. Pathological examination, Giemsa staining on paraffin blocks and haematoxylin and eosin stain were done to assess either presence or absence of *Helicobacter pylori*.

Results: Based on biopsy results, Gastritis and gastric ulcer were diagnosed in 80.69% and 19.3%, respectively. In gastritis and gastric ulcer patients, there was a significant differences between urease test (91.5% and 90%, respectively) in comparison with Giemsa staining (91.5% and 90%, respectively) ($P < 0.05$).

Conclusion: The study revealed that in primary diagnosis and screening of role of *Helicobacter pylori* in patients with gastric ulcer and gastritis, urease test is suitable than giemsa staining.

Keywords: *Helicobacter pylori*, Gastritis, Gastric ulcer, Giemsa staining, Urease test

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