

February 27-28, 2019 Prague, Czech Republic

Recep Kesli et al., J Infec Dis Treat 2019, Volume: 5 DOI: 10.21767/2472-1093-C1-008

## 7<sup>th</sup> Euroscicon Conference on Clinical Pathology and Epidemiology

## EVALUATION OF DIAGNOSTIC VALUES OF CULTURE, RAPID UREASE TEST (RUT) AND HISTOPATHOLOGY IN THE DIAGNOSIS OF *Helicobacter Pylori* infection and *IN Vitro* effects of various antimicrobials Against *H. Pylori*

## Recep Kesli<sup>1</sup>, Huseyin Bilgin<sup>2</sup>, Yasar Unlu<sup>3</sup> and Gokhan Gungor<sup>4</sup>

<sup>1</sup>Selcuk University, Turkey <sup>2</sup>Uludag University, Turkey <sup>3</sup>Saglık Bilimleri University, Turkey

**Aim:** The aim of this study, was to investigate the presence of *Helicobacter pylori* (*H. pylori*) infection by culture, histology and RUT and to determine resistance rates of amoxicillin, clarithromycin, levofloxacin and metronidazole against the *H. pylori* strains by E-test.

**Material & Methods:** A total of 278 patients who admitted to Konya Education and Research Hospital, Department of Gastroenterology with dyspeptic complaints were included in the study. Microbiological and histopathological examinations of biopsy specimens taken from antrum and corpus regions were performed. The presence of *H. pylori* in biopsy samples was investigated by culture, histology and RUT. Antimicrobial resistance of isolates against amoxicillin, clarithromycin, levofloxacin and metronidazole was determined by E-test method.

**Results:** *H. pylori* was detected in 140 of 278 of patients with culture and 174 of 278 of patients with histology in the study. *H. pylori* positivity was also found in 191 patients with RUT. Sensitivity and specificity of the culture, histology and RUT methods of the patients were 76.5% and 88.3%, 87.8% and 63%, 94.2% and 57.2%, respectively. Antibiotic resistance was investigated by E-test in 140 *H. pylori* strains isolated from culture. The resistance rates of *H. pylori* strains to the amoxixillin, clarithromycin, levofloxacin and metronidazole were detected as 9 (6.4%), 22 (15.7%), 17 (12.1%), 57 (40.7%), respectively.

**Conclusion:** In this study, RUT was found to be the most sensitive, culture was the most specific test between culture, histology and RUT methods. Although we detected the specificity of the culture method as high, its sensitivity was found to be quite low compared to other methods. The low sensitivity of *H. pylori* culture may be caused by the factors affect the chances of direct isolation such as spoild bacterium, difficult-to-breed microorganism, clinical sample retrieval and transport conditions.

## **Biography**

Recep Kesli is working as Professor at Selcuk University, School of Medicine, Department of Medical Microbiology. He has published book, wrote chapters in national and international books. He has attended many international congresses and symposiums (more than fourty) presented many abstracts (more than one hundred and fifty) and also presented many speeches. He also has published many articles in international SCI/SCIE and national journals (more than seventy). He has h-index 10. He has many editorial duties as Editor in-Chief. Associate Editor and Editorial Board Member in different international journals. He has received two scientific awards (one international and the other one is national). He has completed more than 20 scientific reserach and RD projects. His area of research interest includes: molecular microbiology. Hepattis C virus, Helicobacter pylori, anaerobic bacteria, Brucella spp. microbiota and Autism spectrum disorder (Autism with the perspective of microbiota gut brain axis).

recepkesli@gmail.com