

International Conference on
MEDICAL AND CLINICAL MICROBIOLOGY
July 03-04, 2017 Bangkok, Thailand

Real-time PCR assay for detection of *Helicobacter pylori* infection of biopsy specimens isolated from Universiti Kebangsaan Malaysia Medical Centre (UKMMC)

Hasyanee Binmaeil, Alfizah Hanafiah and Raja Affendi Raja Ali
Universiti Kebangsaan Malaysia, Malaysia

The aim of this study was to evaluate the accuracy of this new real-time PCR (qPCR) test for detection of *H. pylori* infection in biopsy specimens in comparison to conventional tests: histology, RUT and culture. Patients who attending Endoscopy Unit, UKMMC with dyspepsia and undergoing esophagogastroduodenoscopy between April 2014 to August 2015 were recruited. Stomach biopsies were collected for histology, Rapid urease test (RUT), culture and qPCR analysis. A total of 288 biopsy samples, of which 34 biopsy samples were considered positive for *H. pylori* infection by conventional methods (concordant positive results on 2 or more tests). The remaining 254 biopsies (88.19%) were considered negative for *H. pylori*. In contrast, the new real-time PCR (qPCR) test detected 64 *H. pylori* infection in biopsies of patients, which is significantly higher than conventional test ($P < 0.0001$). *H. pylori* infection rate determined by conventional methods varied from 0.35% to 3.13% among different age groups in 288 patients with dyspepsia. *H. pylori* infection rate determined by qPCR method is higher and varied from 0.69% to 5.21% among different age groups. *H. pylori* infection rate is the highest at 51-60 and 71-80 years old as determined using qPCR and conventional methods, respectively. Results of the present study indicate that qPCR is more sensitive than conventional methods to detect *H. pylori* infection in patients with dyspepsia. In summary, we have developed a rapid and sensitive q-PCR method for detection of *H. pylori* directly from biopsy specimens. This technique offers a significant improvement over other available conventional methods for detecting *H. pylori* in clinical and research samples.

coolballtennis@hotmail.com

Notes: