

# NESTED POLYMERASE CHAIN REACTION FOR DETECTION OF *HELICOBACTER PYLORI* IN GASTRIC BIOPSY SPECIMENS

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**Abstract.** Sensitivity and specificity are important for tests used to detect *Helicobacter pylori* infection from gastric biopsy specimens. Molecular methods, such as PCR and nested PCR, are sensitive methods for *H. pylori* detection. The objective of this study was to evaluate the performance of PCR and nested PCR compared to culture, the rapid urease test (RUT) and histology for the diagnosis of *H. pylori* in 130 gastric biopsy specimens from symptomatic dyspeptic patients. Sensitivity and specificity with PCR were 91 and 100% and with nested PCR were 95 and 97%, respectively. *H. pylori* was detected by PCR and nested PCR at levels as low as 125 fg (70 cells) and 25 fg (14 cells), respectively. These results suggest nested PCR is a highly sensitive direct method to detect *H. pylori* infection from biopsy specimens.

**Key words:** *Helicobacter pylori*, nested PCR, gastric biopsy, detection

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