



## Study on the relationship between *Helicobacter pylori* infection and proliferative kinetics of gastric mucosa

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### Abstract

**AIM:** To explore the relationship between *Helicobacter pylori* (Hp) and proliferative activities of gastric mucosa.

**METHODS:** The data from the 68 cases of chronic gastritis biopsy specimens. The Hp detected by histological methods (wathings-terry, w.s. Silver-staining and 0.25% Fuchsin Basic staining and PCR techniques. The proliferating cell nuclear antigen (PCNA), C-erb-B2 and p53 gene protein expressions were analysed immunochemically (ABC method) Sliver-binding nucleolar regions (AgNOR) were

counted.

**RESULTS:** The Hp positive were 30 cases and Hp negative were 38 cases. The I, II, III, IV degree positive expressions of PCNA were 5, 7, 4, 14 and 27, 11, 0, 0 in Hp positive and Hp negative respectively ( $P < 0.05$ ). The AgNOR counts of the former significantly more than that of the later ( $3.44 \pm 1.20$  and  $1.08 \pm 0.08$ , respectively) ( $P < 0.05$ ). The C-erb-B2 expressions were negative in non-Hp infected mucosa, but the local positive expressions were found in 4 Hp infected mucosa. The p53 were negative in chronic gastritis whether Hp positive or negative.

**CONCLUSION:** The proliferative kinetics of Hp infected gastric mucosa increased, that may be one of the risk factors of gastric carcinogenesis

**Key words:** Helicobacter infection; *Helicobacter pylori*; Gastric mucosa/pathology

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