



## Screening of *Helicobacter pylori* infection in 16 villages of high risk population of gastric cancer

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### Abstract

**AIM:** To study the status of *Helicobacter pylori* (Hp) infection in Zhuanghe area and to analyse the relationship between gastric diseases, gastric cancer and Hp infection respectively.

**METHODS:** A total of 3033 people in 16 villages at the high risk area of gastric cancer were screened by X-ray examination and serum pepsinogen determination. Endoscopy and biopsy were further performed in 1779 cases of them. The histologic changes and status of Hp infection were observed by HE and MB staining. PCR method was also used to detect Hp.

**RESULTS:** The total detection rates of Hp infection were 60.8%. In the group of age 30-59 is the highest; In the male group it was

higher than in the femal group. In the mountainous areas group (64.4%) it was higher than in the coastal areas group (56.7%), and in the group of gastric antrum (36.2%) it was higher than in the group of gastric angles (32.6%) and gastric body (31.2%) ( $P < 0.01$ ). The detection rates of Hp infection in patients with gastric mucosa erosion, gastric ulcer, moderate and severe superficial gastritis and atrophic gastritis was 90.6%, 87.0%, 79.8%, 75.3% respectively, which were higher than that mild superficial gastritis 6.8% ( $P < 0.01$ ). Comparing to that in normal in gastric mucosa (0%), the detection rates in dysplasia (80.0%), and intestinal metaplasia (77.7%) were significantly higher ( $P < 0.01$ ).

**CONCLUSION:** Hp infection rates in residents of Zhuanghe city was positively related to morbidity of gastric mucosa erosion, gastric ulcer, moderate and severe superficial gastritis, atrophic gastritis and gastric cancer. In Zhuanghe, the incidence of gastric cancer is high and there is high prevalence of Hp infection.

**Key words:** Stomach neoplasms/epidemiology; Stomach neoplasms/etiology; *Helicobacter* infections; Mass screening

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