

Diagnosis of *Helicobacter pylori* with emphasis on endoscopic diagnosis

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Abstract

Helicobacter pylori was successfully cultured and identified by Mash all *et al* in 1983. Various studies have since been performed. *H. pylori* infection was classified as a risk factor for stomach cancer (definite carcinogen group I) by the WHO/ IARC in 1994.

AIM: The detection of the organism is crucial for treatment and assessment after treatment.

METHODS: The reliability and specificity of the various methods available show almost no differences, and diagnostic methods include

both endoscopic and non-endoscopic techniques.

RESULTS: On endoscopy, mucosal changes such as erosions and redness are often observed in the pyloric glandular region of the stomach in the initial stage of infection, with subsequent progression to muddy color, atrophy, intestinal metaplasia and ulceration.

Diagnosis is often difficult by endoscopy alone, and mucosal staining with dyes such as phenol red is commonly used as auxiliary method. Histological examination and culture of biopsy specimens, as well as PCR and the rapid urease test are also necessary. Non-endoscopic methods include serum anti-Hp IgG antibody and the ¹³C urea breath test.

CONCLUSION: In Japan, diagnosis and evaluation of *H. pylori* eradication are performed according to the criteria published by the Japanese Society of Gastroenterology.

Key words: *Helicobacter pylori*; Helicobacter infection/diagnosis; endoscopy; gastric ulcer

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