

G-GH-3

An Evaluation of PyloriTek Test for the Diagnosis of *Helicobacter pylori* Infection in Chinese - Before and After Eradication Therapy

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Background: The PyloriTek Test Kit (a one-hour rapid urease test) was developed for the rapid diagnosis of *Helicobacter pylori* (*H. pylori*) during endoscopy. Most studies were performed in western population.

Aim: To evaluate the PyloriTek Test for the diagnosis of *H. pylori* infection in Chinese population.

Methods: Eligible patients without prior treatment or had recent eradication of *H. pylori* were recruited. During endoscopy, biopsies were taken from the antrum and corpus for in-house rapid urease test (RUT), histology and the PyloriTek Test (one antral and one corpus biopsies). Results of the PyloriTek Test were compared with the gold standard (RUT and histology).

Results: Analysis of PyloriTek Test results from the antrum alone (101 patients before eradication and 52 patients after eradication) showed a sensitivity, specificity, and accuracy of 96.3%, 97.9%, and 97.0% respectively for cases before eradication and an accuracy of 100% for cases after eradication. The benefit of an additional body biopsy was marginal and only occurred in the pre-eradication group.

Conclusion: PyloriTek Test was highly accurate for the diagnosis of *H. pylori* infection before and after eradication therapy with a final result available at one hour, which is unmatched by any invasive tests so far. One biopsy from the antrum is highly reliable for this purpose.

G-GH-4

The Prevalence and Significance of Hepatitis GB Virus-C/Hepatitis G Virus Infection in a Large Cohort of Patients with Chronic Hepatitis B Infection, with Chronic Hepatitis C Infection and on Renal Replacement Therapy in Hong Kong

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Aims: This study aims at examining the prevalence of HGV and its effect on the liver biochemistry in patients with asymptomatic chronic HBV infection and chronic HCV infection and in immunocompromized patients who were receiving PD or HD or who had RT.

Patients and Methods: A total of 455 patients [128 had asymptomatic hepatitis B virus infection, 112 had asymptomatic hepatitis C virus infection, 51 patients on haemodialysis (HD), 75 patients on peritoneal dialysis (PD), 89 patients had renal transplantation (RT)] were recruited to study the prevalence of Hepatitis GB virus-C (HGBV-C)/Hepatitis G virus (HGV) infection in Hong Kong.

Results and Conclusions: There was no significant increase in the prevalence of HGBV-C infection in asymptomatic HBV and HCV patients compared to that of controls (1.56% and 7.14% respectively vs 3.85%, both $p = \text{NS}$). The prevalence of HGBV-C in asymptomatic HBV patients was relatively low compared to those of Caucasian studies (8-32%). The liver biochemistry of the 2 asymptomatic HBV patients with HGBV-C infection was normal and they had a low level of HBV viraemia. The liver biochemistry and the HCV RNA positivity of the 8 asymptomatic HCV patients with HGBV-C infection and of 104 asymptomatic HCV patients without HGBV-C infection were similar. Renal patients as a whole had a significant higher prevalence of HGBV-C infection compared to that of control (13.95% vs 3.85%, $p = 0.0271$). The duration of the replacement therapy especially for patients with PD was associated with a higher chance of HGBV-C infection. Among renal patients, RT patients had the highest prevalence of HGBV-C infection (19.1%) probably because of higher susceptibility as a result of immunosuppression. However, HGBV-C infection did not cause liver biochemistry derangement in RT patients. Apparently, HGBV-C infection did not cause significant liver biochemistry derangement both in immunocompetent and immunocompromized patients.