G-GH-7

Low Dose ^{13}C-Urea Breath Test (^{13}C-UBT) with Citrate is Equally Reliable for the Detection of *Helicobacter pylori* Infection in Chinese

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Background: We have shown previously that 75mg ^{13}C-UBT with or without citrate is highly accurate for the diagnosis of *H. pylori* infection in Chinese. Thus we want to test whether a lower dose 50mg ^{13}C-UBT protocol is equally reliable for this purpose.

Methods: Consecutive dyspeptic patients referred for upper endoscopy were recruited. The study was divided into 2 parts. ^{13}C-UBT was performed using (1) 75mg and 50mg of ^{13}C-urea on two separate days without citrate; (2) 50mg ^{13}C-UBT with 2.4gm citrate and compared with golden standard (CLO test and histology).

Results: 205 patients were tested. The sensitivity, specificity and accuracy of 75mg ^{13}C-UBT without citrate (75-UBT (no C)), 50mg ^{13}C-UBT without citrate (50-UBT (no C)), 50mg ^{13}C-UBT with citrate (50-UBT (w C)) with different cut-off (δ) value were listed as follow.

	Sensitivity	Specificity	Accuracy	delta with best Accuracy	delta at 3.5	delta at 5
75-UBT (no C)	100.0	100.0	100.0	4.5	100.0	99.0
50-UBT (no C)	93.9	98.0	96.0	6.5	93.0	95.0
50-UBT (w C)	100.0	98.2	99.0	2.5	97.1	94.3

Conclusion: 50mg ^{13}C-UBT protocol with citrate produced equally reliable results as 75mg ^{13}C-UBT without citrate and is a more economical and cost-effective protocol in Chinese population.

G-GH-8

Empirical Endoscopy, Helicobacter Test and Treat and Empirical Prokinetics are Equally Effective in Symptom Resolution in Primary Care Patients Presenting with Dyspepsia

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Introduction: There are few data on the optimal way to investigate and treat patients presenting with dyspepsia to primary care. Studies comparing endoscopy with empirical H2 antagonists have generally shown comparable costs and efficacy. This is the first study to study empirical prokinetic treatment. **Methods:** Patients aged 18 or above without alarm symptoms presenting with previously uninvestigated dyspepsia to government-run primary care outpatient clinics were randomised into three investigative and treatment groups. (1) Empirical endoscopy: all patients receive oesophagogastroduodenoscopy on presentation. Those with organic lesions were treated accordingly. Those with normal findings or non-erosive gastritis were presumed to have functional dyspepsia and given cisapride 5mg tds for 6 weeks. (2) *Helicobacter pylori* (Hp) test and treat: Patients had a carbon-13 urease breath test on presentation. Hp positive subjects were given omeprazole 20mg b.d., clarithromycin 500mg b.d. and amoxycillin 1g b.d. for one week. Hp negative subjects received cisapride 5mg t.d.s for 6 weeks. (3) Empirical prokinetic: Patients received cisapride 5mg t.d.s. for six weeks. Follow-up was at weeks 0, 2 and 6. Symptom severity (validated dyspepsia severity scale) and quality of life (QOL) (SF-36 scale) were assessed at weeks 0 and 6. Patients in groups 2 and 3 had endoscopy at week 6 for a final diagnosis. If the dyspepsia was not better by week 2, early endoscopy was arranged. Symptom resolution, QOL improvement and final diagnoses were compared. **Results:** Two hundred and thirty four patients were recruited (163 female, mean age 49). Baseline demographics, symptom severity and SF-36 scores were comparable between the 3 groups. 44% were Hp positive. In the endoscopy group, 92% had functional dyspepsia, 1% had oesophagitis and 7% had erosions or ulcers. 26% of Hp testing and 25% of empirical cisapride patients had no improvement of symptoms at week 2 follow-up and needed endoscopy. 15% of patients receiving empirical cisapride had good treatment response but peptic ulcer as the final diagnosis. Symptom resolution and QOL improvement was comparable in the 3 groups. **Conclusion:** Empirical endoscopy, Hp test-and-treat and empirical cisapride were equally effective in symptom and QOL improvement in primary-care patients presenting with dyspepsia. However, peptic ulcers may be missed if empirical cisapride treatment was given without prior endoscopy.