

Effects of daily telephone-based re-education before taking medicine on *Helicobacter pylori* eradication

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Abstract

We read the article "Effects of daily telephone-based re-education before taking medicine on *Helicobacter pylori* (*H. pylori*) eradication: A prospective single-center study from China" written by Wang *et al* with great interest. It is reported in American and European guidelines that there is no sufficient test

for the diagnosis of *H. pylori* except culture and that using at least two different tests for diagnosis of *H. pylori* is recommended. Patients who used antibiotics or bismuth salts in the previous 2 wk were excluded from study. But patients who used probiotics and antioxidant vitamins such as vitamins C and E were not excluded.

Key words: *Helicobacter pylori*; Eradication rates; Telephone based education

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Core tip: We read the article "Effects of daily telephone-based re-education before taking medicine on *Helicobacter pylori* (*H. pylori*) eradication: A prospective single-center study from China" written by Wang *et al*. It is reported in guidelines that there is no sufficient test for the diagnosis of *H. pylori* except culture and that using at least two different tests for diagnosis of *H. pylori* is recommended. Patients who used antibiotics or bismuth salts in the previous 2 wk were excluded from study.

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TO THE EDITOR

We read the article "Effects of daily telephone-based re-education before taking medicine on *Helicobacter pylori* eradication: A prospective single-center study from China" written by Wang *et al*^[1] with great interest. The authors investigated the effects of daily

telephone based re-education before taking medicine for the eradication of *Helicobacter pylori* (*H. pylori*) on the compliance and the eradication rate. We thank the authors for their contribution of well-presented study. We believe that these findings of current study will encourage further studies for *H. pylori* eradication.

H. pylori remains one of the most widespread worldwide human infections and is associated with upper gastrointestinal states, including peptic ulcer disease, chronic gastritis, and gastric malignancy^[2]. The prevalence of *H. pylori* is closely related to socioeconomic status. This infection is more prevalent in developing countries than in Western countries. Wang *et al*^[1] informed us that in their study that the daily TRE before taking medicine had no significant impact on the patients' compliance, satisfaction, or *H. pylori* eradication, but reduced the rate of adverse events. However, we believe that some points that should be emphasized in the study.

The authors reported in the present study that they had used diagnosis of *H. pylori* infection by at least one of the following methods: ¹³C-urea breath test, histology, rapid urease test or bacterial culture. It is reported in American and European guidelines that there is no sufficient test for the diagnosis of *H. pylori* except culture and that using at least two different tests for diagnosis of *H. pylori* is recommended^[2,3]. Hence, we consider that the number of *H. pylori* positive patients is different from that found in this present study. It is obviously seen that this distinction in number of *H. pylori* positive patients will impress the results of the study.

Additionally, patients who used antibiotics or bismuth salts in the previous 2 wk were excluded from study. But patients who used probiotics and antioxidant vitamins such as vitamins C and E were not excluded. It has been thought that vitamins C and

E break the microenvironment created by *H. pylori* or directly inhibit bacteria. Vitamin C can inactivate the urease enzyme, which allows the endurance of *H. pylori* and the colonization of the gastric mucosa at a low pH. Thus, vitamin C may inhibit the spread, growth, and colonization of *H. pylori* in the early periods of infection^[4]. Probiotics reduce the adverse effects of *H. pylori* eradication treatment, this could help increasing the adherence of patients to treatment and could increase the eradication rate. Probiotics may also inhibit the growth of *H. pylori*, stimulate an immunological response and reduce the inflammatory effects of infection^[5]. It is clearly seen that this factors can change the results of the study.

REFERENCES

- 1 **Wang CH**, Liao ST, Yang J, Li CX, Yang YY, Han R, Chen DF, Lan CH. Effects of daily telephone-based re-education before taking medicine on Helicobacter pylori eradication: A prospective single-center study from China. *World J Gastroenterol* 2015; **21**: 11179-11184 [PMID: 26494972 DOI: 10.3748/wjg.v21.i39.11179]
- 2 **Chey WD**, Wong BC. American College of Gastroenterology guideline on the management of Helicobacter pylori infection. *Am J Gastroenterol* 2007; **102**: 1808-1825 [PMID: 17608775 DOI: 10.1111/j.1572-0241.2007.01393.x]
- 3 **Malfertheiner P**, Megraud F, O'Morain CA, Atherton J, Axon AT, Bazzoli F, Gensini GF, Gisbert JP, Graham DY, Rokkas T, El-Omar EM, Kuipers EJ. Management of Helicobacter pylori infection--the Maastricht IV/ Florence Consensus Report. *Gut* 2012; **61**: 646-664 [PMID: 22491499 DOI: 10.1136/gutjnl-2012-302084]
- 4 **Demirci H**, Uygun İlikhan S, Öztürk K, Üstündağ Y, Kurt Ö, Bilici M, Köktürk F, Uygun A. Influence of vitamin C and E supplementation on the eradication rates of triple and quadruple eradication regimens for Helicobacter pylori infection. *Turk J Gastroenterol* 2015; **26**: 456-460 [PMID: 26510082 DOI: 10.5152/tjg.2015.0233]
- 5 **Homan M**, Orel R. Are probiotics useful in Helicobacter pylori eradication? *World J Gastroenterol* 2015; **21**: 10644-10653 [PMID: 26457024 DOI: 10.3748/wjg.v21.i37.10644]

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