

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

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Author contributions: Demirci H designed research, performed research and wrote the paper; Ozturk K contributed new reagents or analytic tools; and Kurt O analyzed data.

Conflict-of-interest statement: No conflict of interest

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Received: December 15, 2015
Peer-review started: December 16, 2015
First decision: December 30, 2015
Revised: January 5, 2016
Accepted: January 30, 2016
Article in press: January 30, 2016
Published online: April 21, 2016

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.

Demirci H, Ozturk K, Kurt O. Effects of daily telephone-based re-education before taking medicine on *Helicobacter pylori* eradication. *World J Gastroenterol* 2016; 22(15): 4071-4072
Available from: URL: <http://www.wjgnet.com/1007-9327/full/v22/i15/4071.htm> DOI: <http://dx.doi.org/10.3748/wjg.v22.i15.4071>

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.

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P- Reviewer: Chmiela M, Du YQ, Ozen H, Said Z

S- Editor: Gong ZM **L- Editor:** A **E- Editor:** Zhang DN





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ISSN 1007-9327



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