

A Comparative Study of Natural Eradication of *Helicobacter pylori* vs. Antibiotics

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Abstract

The study aimed at comparison of the efficacy of natural remedies versus the conventional antibiotic therapy in eradication of the symptoms and existence of *Helicobacter pylori*.

The latest reports in literature demonstrate a definite flare up of many medical challenges related to *H. pylori* through immune or different unknown reasons. *H. pylori* can migrate to the colon; it will continue producing ammonia, unopposed or buffered by any acidity, which could lead to accumulation of profuse toxic amounts of ammonia; this could definitely predispose to different adverse toxic effects to the body especially to those disadvantaged predisposed population.

The literature confirms that recurrence of *H. pylori* is hardly avoidable; whether it is gastric recurrence from colonization of the bacterium in dental plaques or fecal-oral recurrence from the colon.

The study included three groups of patients suffering from dyspepsia associated with *H. pylori*; each group size was 100 patients. The patients were randomly included in the study without any selection during the period between October 2010 and May 2014. The first group was treated with vinegar therapy alone for one week to 10 days. The second group was treated with the senna purge alone once or twice. The third group was treated with both the senna purge once followed by vinegar therapy for one week.

Specific tests; urea breath test and *H. pylori* fecal antigen, were used for inclusion of patients in the study and for confirmation of *H. pylori* eradication after end of treatment.

The success rate of treatment in the first group was 91%, it was 95% in the second group and 97% in the third group; while the best success rate of the current antibiotic *H. pylori* eradication therapies as demonstrated in literature was maximally 83%.

Natural measures of *H. pylori* eradication employing the senna purge and vinegar are superior in efficacy to the current antibiotic strategies. Eradication of abnormal *H. pylori* strains using natural measures is simple, safe, costless, effective and decisive; it is worthy to change attitude of medicine in dealing with the challenge known as *H. pylori*.

Keywords: *Helicobacter pylori*; Antibiotic therapy

Introduction

The widespread prevalence and the challenges constituted by *Helicobacter pylori*, namely its close relation to acid peptic disease, gastric carcinoma and lymphoma have led to the widely-established medical concept that *H. pylori* eradication should be a necessary attempt. Although eradication regimens do eradicate *H. pylori* from the stomach; the emergence of antibiotic-resistant *H. pylori* strains, the severe side effects and high costs are major drawbacks of these treatments [1]. More efficient, economic and friendly drugs need to be developed.

The latest reports in literature demonstrate a definite flare up of many medical challenges related to *H. pylori* through immune or different unknown reasons [2], this could further indicate that the current eradication strategies are not efficient to control all the challenges related to *H. pylori*.

H. pylori resides and colonizes under the layer of mucus overlying gastric mucosa; colonization rates increase with age that could reach 50% in an asymptomatic adult over 50 years of age. *H. pylori* is existing mainly in the stomach since an immemorial time but it can exist and reside in many other sites in the body [2,3].

The efficacy of *H. pylori* eradication treatment for non-ulcer dyspepsia is almost controversial, different randomized controlled trails have given conflicting results. Overall, *H. pylori* eradication

treatment for non-ulcer dyspepsia had no significant effect on quality of life compared with placebo [4-6]. *H. pylori* eradication for non-ulcer dyspepsia symptoms was found more costly if compared to antacid treatment [7]. Although the appropriate length of *H. pylori* treatment remains also controversial, yet most strategies suggest that eradication of *H. pylori* is more cost effective than conventional therapy for the treatment of gastric and duodenal ulcers [8,9].

H. pylori recurrence; whether it is gastric recurrence from dental plaques, fecal-oral recurrence or recurrence via oral intake, is hardly avoidable [2,4]. Furthermore, treatment that does not eradicate *H. pylori* is associated with rapid recurrence of acid-peptic disease in most patients [10].

In vitro inhibition of *H. pylori* growth was demonstrated due to the effect of pH of bio-organic acids; lactic formic and acetic. Natural measures (the senna leaves extract purge and bio-organic acids) have been recently shown to effectively dealing with all the challenges related to *H. pylori* [11-14].

Aim

The study aimed at comparison of the efficacy of natural remedies versus the conventional antibiotic triple therapeutic strategies in eradication of the symptoms and existence of *H. pylori*.

Design and Setting

Prospective study done in Balghsoon Clinics in Jeddah/Saudi Arabia during October 2010-May 2014

Patients and Methods

The scientific interest of this study included three groups of patients suffering from dyspepsia associated with *H. pylori*; each group size was 100 patients. The patients were randomly included in the study without any selection during the period between October 2010 and May 2014. The first group was treated with vinegar therapy alone for one week to 10 days. The second group was treated with the senna purge alone once or twice. The third group was treated with both the senna purge once followed by vinegar therapy for one week.

Specific tests; urea breath test and *H. pylori* fecal antigen, 4 were used for inclusion of patients in the study and for confirmation of *H. pylori* eradication after end of treatment.

Results

The success rate of treatment in the first group was 91%, it was 95% in the second group and 97% in the third group. The incidence of recurrence was minor and it was mainly a recurrence via misbehavior in food intake within 1-3 month after natural therapy. It was 7 patients (7.7%) in the first group, 4 patients (4.2%) in the second group and 3 patients (3%) in the third group. All these cases of recurrence have been readily cured by simple revision of vinegar therapy alone, the senna purge alone or both.

The results of this study were compared with the best success rate of the current antibiotic *H. pylori* eradication therapies as demonstrated in literature which was found to be maximally 83% [15].

Ethical Considerations

An informed signed consent was taken from all patients, they were made aware about safety of the natural therapy and they were free to quit the study whenever they like. The research proposal was approved and the study followed the rules of the Research Ethics Committee of Balghsoon Clinics in Jeddah, Saudi Arabia.

Discussion

Although the eradication regimens efficiently eradicate *H. pylori* from the stomach [16], it was suggested that the antibiotics could have forced the stomach bacterium to migrate to the colon rather than eradicating it from the stomach. Migration of *H. pylori* to the colon has been also reported in literature [3,17,18]. The suggestion that antibiotics force *H. pylori* to migrate to the colon rather than eradicating is supported by the finding that pseudo-membranous toxic colitis and toxic megacolon have developed after eradication of *H. pylori* from the stomach by antibiotics [19,20]. *H. pylori* in the colon becomes a poison itself by encoding auto-immunity being considered a foreign structure to the tissues and becomes a source of poison by producing profuse toxic amounts of ammonia which is unopposed or buffered by any acidity like in the stomach [14].

Antibiotic-resistant *H. pylori* strains are becoming increasingly prevalent; treatment failure would add further cost and burden as most physicians currently treat *H. pylori* without relying on antimicrobial sensitivity testing to choose the best effective regimen [21]. *H. pylori* recurrence; whether it is gastric recurrence from dental plaques, fecal-oral recurrence or recurrence via oral intake, is hardly avoidable [2,4]. Dental plaques being a secondary reservoir for *H. pylori* can lead to gastric recurrence. In a study done in March 2003, gastric eradication was achieved in 83% of patients, while efforts to eradicate dental plaque colonization were unsuccessful in all patients [15].

Therapy with vinegar has been shown to be effectively relieving *H. pylori* dyspeptic symptoms due to interference with the energy metabolism of the bacterium and its respiratory chain metabolism. The senna leaves extract purge was found to kill and expel rather completely the colonic *H. pylori* strains. Three times dilutions and extreme dilutions of dietary vinegar (acetic acid 6%) were found directly lethal to *H. pylori* if added to its culture media [11-14]. Antibiotics are seldom effective against extra-gastric *H. pylori* strains [22]. Existence of *H. pylori* in the colon is typically life-long unless eradicated, [23] and there is no proven way to eradicate it from the colon rather than the senna purge [13,14,18].

Experimental findings of this study constitute a simple answer for a complex subject; it offers a real decisive solution for all the challenges caused by *H. pylori* including symptomatic relief, eradication and control of reasons of recurrence. It is superior in having the following advantages:

- It is simple, costless and adequately effective
- It gives rather an immediate symptomatic relief
- It ensures high cure results, (91-97%)
- It does not deprive the alimentary system from the useful bactericidal effect of gastric acid unlike other strategies that include proton pump inhibitors
- It does not include the risk of low acidity-related carcinoma at the cardia of stomach
- It does not include the side effects of combined antibiotic therapy

- It does not carry the disadvantage of increased gastro-oesophageal reflux symptoms
- It provides an effective solution for eradication of the oral colonization preventing gastric recurrence from dental plaques by washing mouth with diluted vinegar twice/week
- The immediate influence of vinegar on the organism's metabolism allows no chance for resistance of treatment or mutation and development of resistant strains
- It gives a good answer for the control of fecal-oral recurrence by disinfecting hands with vinegar after washing with water and soap.
- Recurrence is negligible (3-7.7%), and whenever happens, it is simply cured.
- In addition to all these advantages, the natural remedy used in this study is giving good promises of being an effective prophylactic measure against *H. pylori* recurrence via oral intake by interference of vinegar with re-setting up of bad *H. pylori* colonization in the stomach after any query meal.

Moreover, if eradication of *H. pylori* with antibiotics alone causes regression of gastric mucosa associated lymphoid tissue (MALT) lymphoma in 75% of patients, and those patients have shown sustained clinical remission of their lymphomas [24-30] they are still carrying the risk of developing low gastric acidity-related carcinoma of the gastric fundus. As long as vinegar therapy alone can readily eradicate *H. pylori* from the stomach; therefore, it could cause sustained regression of gastric MALT lymphoma without the same risk of low acidity-related problems at the cardia of the stomach.

H. pylori colonized the stomach since an immemorial time; as if both the stomach wall and the bacterium used to live together in peace harmless to each other. Observational studies have proposed a protective role of *H. pylori* against the development of gastro-oesophageal reflux disease, and suggested that *H. pylori* antibiotic eradication treatment may increase the incidence of reflux symptoms [24-26]. All these findings could refer to an essential biologic fact that *H. pylori* is a natural bacterium. Existence of abnormal-behavior *H. pylori* strains is essentially a sanitary conflict before it is a medical challenge, 2 sanitary problems are treated with antiseptic measures but not antibiotics; vinegar could be the answer.

The fact that vinegar has got an antibacterial activity that can induce immediate *in vitro* inhibition of the growth of pathogenic bacteria allowing its use in different practical applications has been reported in literature [27,28]. It has been reported that bacterial growth on fish fillets media was highly inhibited by relatively small concentrations of acetate (less than 0.3%) [29]. These facts strongly support the idea of using vinegar for hands disinfection to control fecal-oral recurrence in patients under *H. pylori* eradication therapy.

Conclusion

Natural measures of *H. pylori* eradication seem superior in efficacy to the current antibiotic eradication strategies and are worthy to change attitude of medicine in dealing with the challenge known as *H. pylori*. *H. pylori* is essentially a sanitary conflict before it is a medical challenge, sanitary problems are treated with antiseptic measures but not antibiotics; vinegar could be the answer. *H. pylori* could be a natural bacterium; natural events when deviate from the nature are corrected with natural measures but not antibiotics.

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