

regimen resulted in a significantly higher eradication rate (92.2%) compared to a triple-drug regimen only (63.3%).

Conclusion: The current study investigated the adding mastic gum to the standard triple-drug regimen can improve the eradication rate of *H. pylori* infection. This could potentially offer an alternative treatment option for patients with *H. pylori* infection, especially those with antibiotic resistance. Applying the mastic gum has approved its effectiveness, and it could reduce the reliance on antibiotics and minimize the risk of resistance development.

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Assessing the Efficacy of a Modified Triple Drug Regimen Supplemented with Mastic Gum in the Eradication of *Helicobacter pylori* Infection

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Introduction/Objective: *Helicobacter pylori* (*H. pylori*) is a bacterium that infects the stomach and small intestine. It is known to be the main cause of gastritis and peptic ulcers. The infection is common worldwide, with a prevalence rate of 50% in many countries. Eradication of *H. pylori* infection is crucial, as failure to do so can lead to serious complications such as gastric cancer. Treatment for *H. pylori* infection involves a combination of antibiotics, proton pump inhibitors (PPIs), and bismuth compounds. However, due to the emergence of antibiotic resistance, there is a need for alternative treatments.

Methods/Case Report: This study had been a randomized controlled trial involving 180 patients with *H. pylori* infection. The patients had been divided into two groups: Group A received the standard triple-drug regimen (clarithromycin, amoxicillin, and omeprazole), while Group B received the triple-drug regimen along with mastic gum. The treatment duration was 14 days for both groups. Baseline demographics and clinical characteristics had been collected for all patients. The presence of *H. pylori* infection had been confirmed by a urea breath test and fecal antigen test.

Results (if a Case Study enter NA): This study has investigated the effects of mastic gum on *H. pylori* infection. In a randomized controlled trial of 180 *H. pylori*-positive patients, mastic gum was found to be effective in eradicating the bacteria in 83 of 90 patients (92.2%) who received the supplementation Group B received the triple-drug regimen along with mastic gum, compared to only 57 of 90 patients (63.3%) in the group A ($p < 0.001$). Thus, a randomized controlled trial of 90 patients with *H. pylori* infection found that combination therapy of mastic gum and a triple-drug