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