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**Simplified Helicobacter pylori therapy for patients with penicillin allergy: a randomised controlled trial of vonoprazan- tetracycline dual therapy**

Gao W, Liu J, Wang X, et al. [Simplified Helicobacter pylori therapy for patients with penicillin allergy: a randomised controlled trial of vonoprazan-tetracycline dual therapy](https://gut.bmj.com/content/73/9/1414). Gut 2024; 73:1414-1420. doi: 10.1136/gutjnl-2024-332640.

Helicobacter pylori infection is associated with gastric cancer. Eradication therapy usually involves amoxicillin. Currently, for patients with a penicillin allergy, the alternative regimen consists of Bismuth quadruple therapy (Lansoprazole, Bismuth, Tetracycline and Metronidazole). Gao et al., have previously shown in a retrospective study that a combination of Vonoprazan (a novel potassium-competitive acid blocker) and Tetracycline (VT, dual therapy) was able to achieve eradication.

In this study, Gao et al., performed a prospective single-centre open-label randomised controlled trial to investigate non-inferiority of vonoprazan-tetracycline dual therapy as a Helicobacter pylori (H. pylori) eradication therapy compared to Bismuth quadruple therapy in patients with a penicillin allergy. They included treatment-naïve patients who underwent diagnostic confirmation with positive 13C-urea breath test. 300 patients were included and randomised in a 1:1 ratio between August 2023 and March 2024.

The eradication rates for H. pylori were 92% (95% CI 86.1% - 95.6%) in the VT dual therapy group and 89.3% (95% CI 83.0% - 93.6%) in the Bismuth quadruple therapy group in the intention to treat analysis. This confirmed non-inferiority of VT dual therapy. 3 patients in the VT group and 13 patients in the Bismuth quadruple therapy group discontinued due to treatment-emergent adverse events.

Gao et al., concluded that vonoprazan and tetracycline dual therapy was non-inferior to Bismuth quadruple therapy in patients with penicillin allergy for Helicobacter eradication. Further validation of these findings in a broader population is required and the lack availability of these antibiotics may limit its clinical impact.