****

**Three-in-one single capsule bismuth quadruple therapy is more effective at three than four times daily dosing. - Pérez-Aisa A, Nyssen O, Keco-Huerga A et al.**

Pérez-Aisa A, Nyssen O, Keco-Huerga A et al. [*Bismuth quadruple three-in-one single capsule three times a day increases effectiveness compared with the usual four times a day schedule: results from the European Registry on Helicobacter pylori Management (Hp-EuReg).*](https://gut.bmj.com/content/72/11/2031) Gut 2023; 72(11): 2031-2037. doi: 10.1136/gutjnl-2022-329259

Heliobacter pylori infects over half of the world’s population and is linked to a number of gastrointestinal diseases. With a global increase in antibiotic resistance, consensus conferences recommend using treatments with a minimal 90% cure rate, and contemporary studies have steered away from triple therapies and towards quadruple therapies consisting of a proton pump inhibitor (PPI), antibiotics and, in some schedules adjuvant bismuth. With the commercialisation of a three-in-one capsule (containing 140mg bismuth subcitrate potassium, 125mg metronidazole and 125mg tetracycline), which simplifies the prescription schedule, there has been growing enthusiasm for single capsule bismuth quadruple therapy (scBQT).

The recommended dosing regime, according to the scBQT technical datasheet, is three capsules every 6 hours (four times a day) plus concomitant omeprazole 20 mg two times a day. Whilst in practice, gastroenterologists often modify this regime to four capsules three times a day to adapt to mealtimes and facilitate adherence, the efficacy and safety of this approach had yet to be evaluated.

In this study, Pérez-Aisa et al., all Spanish adult patients registered in the Asociación Española de Gastroenterología Research Electronic Data Capture (REDCap) database from June 2013 to March 2021 receiving 10-day scBQT were analysed, with effectiveness, adherence and safety of scBQT given with the above three times a day schedule calculated and compared with the four times daily one. Appraising the 3712 cases, the Pérez-Aisa et al., strikingly concluded that the four capsules three times a day regime significantly increases cure rates as compared with the recommended schedule – 94% (95% CI (confidence interval) 92.7 to 95.6) vs. 91% (95% CI 89.9 to 92.2) – and that the concomitant use of higher omeprazole doses (40mg two times a day) further increased effectiveness, both groups with comparable safety and adherence. These conclusions provide a rare easily implementable, and now evidence-based, practice modification for a commonly encountered entity.