

Letter to Editor

Finally, it is Bismuth's Time

Sir,

In an interesting Turkish retrospective study, conducted between 2012 and 2015, involving 1510 adults, Kekilli *et al.*^[1] tested triple therapy (lansoprazole 30 mg b.i.d., clarithromycin 500 mg b.i.d., and amoxicillin 1 g b.i.d.), bismuth group C (lansoprazole, clarithromycin, amoxicillin, and bismuth subsalicylate 524 mg b.i.d.), and bismuth group M (lansoprazole, amoxicillin, metronidazole 500 mg t.i.d., and bismuth) for 14 days as first line treatment for *Helicobacter pylori* infection. *H. pylori* eradication was achieved in (per-protocol analysis) 64.7% of the patients in the triple therapy group, 95.4% in the bismuth group C, and 93.9% in the bismuth group M. Intolerable side effects leading to interruption of therapy were rare (approximately 2–3%) and similar in the different groups.

These results are in agreement with the recently published Maastricht V Consensus Report,^[2] and confirmed that clarithromycin-based triple therapy should be abandoned when the clarithromycin resistance rate is more than 15%. In regions with high clarithromycin resistance but low-to-intermediate metronidazole resistance (<40%), 14 days bismuth quadruple therapy is advised as first line treatment.^[3]

In Turkey, the *H. pylori* clarithromycin resistance is 16.3–50% whereas metronidazole resistance is 39.2%.^[2]

In 2012, in Piedmont, Northern Italy, a region with the same *H. pylori* antibiotic resistance of Turkey, we^[4] have prospectively evaluated the *H. pylori* eradication rate of 182 consecutive naive patients treated with a clarithromycin-based triple therapy: The eradication rate was 73.4%, which is considered unacceptable.^[5]

In conclusion, the study conducted by Kekilli *et al.*^[1] reaffirm that triple therapy now has an unacceptable eradication failure rate and it should no more be the first choice in countries with a high *H. pylori* resistance rate to clarithromycin. In this context, now is the era of bismuth-based quadruple therapy as first line treatment. When available, this could be prescribed as the new

formulation with bismuth, metronidazole, and tetracycline contained in a single capsule (three-in-one).^[3]

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Conflicts of interest

There are no conflicts of interest.

Davide G. Ribaldone, Giorgio Saracco¹,
Rinaldo Pellicano²

General and Specialist Medicine Department, Città della Salute e della Scienza of Turin, ²Department of Gastroenterology, Molinette Hospital, Turin, ¹Department of Oncology, University of Torino, Torino, Italy
E-mail: davrib_1998@yahoo.com

REFERENCES

1. Kekilli M, Onal IK, Ocal S, Dogan Z, Tanoglu A. Inefficacy of triple therapy and comparison of two different bismuth-containing quadruple regimens as a firstline treatment option for *helicobacter pylori*. *Saudi J Gastroenterol* 2016;22:366-9.
2. Malfertheiner P, Megraud F, O'Morain CA, Gisbert JP, Kuipers EJ, Axon AT, *et al.* Management of *Helicobacter pylori* infection-the Maastricht V/Florence Consensus Report. *Gut* 2016. pii: Gutjnl-2016-312288.
3. Pellicano R, Ribaldone DG, Fagoonee S, Astegiano M, Saracco GM, Mégraud F. A 2016 panorama of *Helicobacter pylori* infection: Key messages for clinicians. *Panminerva Med* 2016;58:304-17.
4. Ribaldone DG, Fagoonee S, Astegiano M, Saracco G, Pellicano R. Efficacy of amoxycillin and clarithromycin-based triple therapy for *Helicobacter pylori* eradication: A 10-year trend in Turin, Italy. *Panminerva Med* 2015;57:145-6.
5. Gisbert JP, Calvet X, O'Connor A, Mégraud F, O'Morain CA. Sequential therapy for *Helicobacter pylori* eradication: A critical review. *J Clin Gastroenterol* 2010;44:313-25.

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