What is the best azithromycin-based therapy for Helicobacter pylori infection?

J Antimicrob Chemother 1997; 39: 111

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Sir,

In their recent study, Caselli et al. did not show any significant difference in Helicobacter pylori eradication between two dual therapies using omeprazole plus either amoxycillin or azithromycin. The authors concluded that the efficacy of the therapy with omeprazole and azithromycin may be increased by adding amoxycillin or a nitroimidazole.

In our experience the use of azithromycin in anti-H. pylori therapies has shown contrasting results. A dual therapy containing omeprazole and azithromycin provided an eradication rate of only 47%. Thus, the inefficacy of azithromycin-based dual therapy compared with newer short-term low-dose triple therapies is evident. On the other hand, we used azithromycin in two different low-dose short-term triple therapies: omeprazole and tinidazole for 7 days plus azithromycin for 3 days, and omeprazole and amoxycillin for 7 days plus azithromycin for 3 days. With the former regimen we obtained a satisfactory eradication rate of 80% while the latter provided a rate of only 53.3%.

In light of these experiences it should be interesting to assess some unclear aspects: (i) since tinidazole was more effective than amoxycillin in association with azithromycin and omeprazole, it would be interesting to see if metronidazole is as effective as tinidazole, considering the lower cost of metronidazole; (ii) in our study tinidazole was administered for 7 days. It would be interesting to verify if a 3 day tinidazole administration has the same therapeutic efficacy. In this way both the cost and side-effects should be reduced; (iii) lansoprazole instead of omeprazole may improve the eradication rate, as this proton-pump inhibitor (PPI) possesses high anti-H. pylori activity in vitro and is cheaper than omeprazole.

In conclusion, we agree with Caselli et al. about the partial efficacy of azithromycin in dual therapy with omeprazole. We think that this macrolide can be effective in short-term low-dose triple therapies, especially in combination with a PPI and a nitroimidazole. The possible appearance of azithromycin resistance remains an unsolved question, but it has already been demonstrated with a dosage of 500 mg/day in monotherapy.

References