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Helicobacter pylori eradication and aspirin: a puzzle yet to be solved

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***Helicobacter pylori* eradication and aspirin: a puzzle yet to be solved**

We read with great interest the Article by Chris Hawkey and colleagues¹ on the *Helicobacter* Eradication Aspirin Trial (HEAT). The authors should be commended for performing such a complex trial. Although the trial was conceived to evaluate the role of *Helicobacter pylori* eradication in older patients (aged ≥ 60 years) prescribed aspirin, the study was not planned to verify the eradication. A breath retest was randomly performed in only 10% of patients, reporting *H pylori* eradication in 146 (90.7%) of 161 patients receiving active eradication therapy. Such high eradication is usually achieved only with quadruple therapies lasting 10 days or longer, but not with 7-day triple therapies.^{2,3} Furthermore, *H pylori* eradication was unexpectedly observed in 41 (24.0%) of 171 patients in the placebo group. Although exposure to clarithromycin, which occurred in 13 (32%) of the 41 control patients with a negative repeat breath test, might theoretically support these results,⁴ there is no clear explanation for the remaining cases. These findings suggest that it would have been worthwhile to assess the eradication in a new larger random sample in both groups.

During the first 2.5 years of follow-up, prescriptions for aspirin decreased progressively in both study groups, while prescriptions for proton pump inhibitors increased in both groups. Even if analyses were adjusted for time-varying prescribed medications, this trend might have had consequences on the second part of the follow-up with regard to the primary outcome, and a type two error cannot be excluded.

HEAT is an important study showing that *H pylori* eradication confers some benefits in the primary prevention of ulcer bleeding. However, future trials should evaluate *H pylori* eradication in all enrolled patients, and adopt more rigorous criteria on the use of proton pump inhibitors to better clarify the effect of eradication on aspirin-associated ulcer bleeding.

We declare no competing interests.

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