Effect of proton pump inhibitor use on *Helicobacter pylori* positivity and atrial fibrillation

Kadri Atay1
Omer Kaya2

1Istanbul University, Cerrahpasa School of Medicine, Division of Gastroenterology, 2Medipol University, Department of Internal Medicine, Istanbul, Turkey

Dear editor

We read with interest the report by Wang et al regarding the association between *Helicobacter pylori* infection and atrial fibrillation.1 One of our concerns about this well designed study is the lack of reporting of proton pump inhibitor (PPI) use in the patients and controls. It is well known that use of PPIs influences the results of some tests for *H. pylori*, including the urea breath test, which the authors used in their study. Notably, the frequency of *H. pylori* antibody positivity was similar between all three groups while *H. pylori* infection seems to be significantly more common in subjects with long-standing atrial fibrillation. More frequent use of PPIs may potentially explain the lower frequency of *H. pylori* positivity in the control group and short-term atrial fibrillation group. Further, there are some recent reports indicating a protective effect of PPIs on the risk of atrial fibrillation, especially in people with gastroesophageal reflux disease.2 In conclusion, use of PPIs may have influenced some of the test results in this study, including the risk of atrial fibrillation.

Disclosure

The authors have no conflicts of interest to disclose in relation to this communication.

References

Authors’ reply
De-Zhao Wang1
Wei Chen1
Song Yang2
Jun Wang3
Qun Li1
Qiang Fu2
Shi-Jing Li3
Bu-Xing Chen1
1Department of Cardiology, Beijing Tiantan Hospital, Capital Medical University, 2Department of Ultrasonography, Beijing Tiantan Hospital, Capital Medical University, 3Department of Cardiology, Beijing Mentougou District Hospital, Beijing, People’s Republic of China

Dear editor
We are very glad to respond to the enquiry from Kadri Atay and Omer Kaya about use of PPIs in our subject. This study was a retrospective, cross-sectional analysis from a single center, and patients with gastrointestinal disease and those on PPI therapy before recruitment were excluded from the study.

Disclosure
The authors report no conflicts of interest in this communication.