LETTER TO THE EDITOR

Comments on Umer Draz et al. (J Pak Med Assoc. 2018; 68: 939-41)

Presence of pre-diabetes in Helicobacter pylori positive versus Helicobacter pylori negative patients having dyspepsia

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We have read with great interest the article by Draz et al, reporting the prevalence of *Helicobacter pylori (H. pylori)* infection, in patients with dyspepsia and pre-diabetic status. The authors found that 58.5% of patients with *H. pylori* infection versus 45.9% (p=0.03) of patients without *H. pylori* had pre-diabetes. The method used to diagnose *H. pylori* infection was the histology based on bioptic samples taken in antrum during gastroscopy.[1] This latter point raises a crucial criticism. When a patient needs a gastroscopy, due to alarming symptoms or older age (generally >45 years, but age should be determined locally according to gastric cancer risk), *H. pylori* infection can be detected on biopsies taken in the stomach from two topographical locations, the antrum and the corpus. Since the inherent risk of any biopsy procedure is sampling error, to biopsy both gastric compartments (two biopsies from the antrum and two from the corpus) increases the test's sensitivity, especially if the patient was recently treated with a proton pump inhibitor drug.[2] When gastroscopy is not mandatory, C-urea breath test (UBT) is the most accurate tool to detect *H. pylori* infection and is more cost-effective than endoscopy. This method is based on the principle that, in the presence of *H. pylori* urease, labelled carbon dioxide is exhaled in the expired breath. In contrast to biopsy-based tests, UBT is not liable to sampling errors (it tests the entire stomach).[2]

Thus, although the findings of Draz et al agree with a large series of studies,[3] the accuracy of their findings could be increased avoiding the risk of false-negative results due to the limited area of stomach investigated for *H. pylori* infection.

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References

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