

Response to 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

Nasir Farooq Butt

We appreciate the reader for the kind insight into our Short Report.

Mayo Hospital Lahore is one the largest public-sector hospitals in Pakistan but unfortunately, we don't have the facilities to do urea breath test (UBT) or stool antigen test to detect *H. Pylori* infection. Only available method to detect *H. Pylori* is to do Gastroscopy with biopsy and histopathology. We send our patients to Gastroenterologist who does Gastroscopy along with antral biopsies for *H Pylori* diagnosis.

There has been some controversy over the appropriate biopsy site for detecting *H. pylori* by biopsy based-methods, such as culture, histology, or a rapid urease test. Studies evaluating the performance of these diagnostic methods have shown that antral biopsy specimens had excellent sensitivity and specificity (over 90%), in the non-ulcer dyspepsia or peptic ulcer patients.¹ Antral or angularis biopsy has also been reported to be more sensitive in the detection of *H. pylori* when compared to that of the corpus. However, these findings are not applicable to any other disease spectrum, such as gastric ulcer or cancer, where antral biopsy alone was not sufficient, and corpus biopsy was recommended as a better site for *H. pylori* detection.^{1,2} Study done by Lee et al³ demonstrated that two biopsy specimens from the antrum and one biopsy from the incisura angularis provided high diagnostic sensitivity and specificity, with an accuracy greater than 90%. But histological examination of two corpus biopsy specimens showed low sensitivity. Sampling errors, insufficient bacterial load, bacterial clearance, and patchy bacterial distribution are common causes of false negative results in corpus biopsy histology. Furthermore, biopsy specimens from both antrum and corpus showed the same sensitivity as compared with an antrum biopsy in dyspeptic patients. This is because when corpus *H. pylori* infection occurs, antrum *H. pylori* infection exists already.

West Medical Ward, Mayo Hospital, King Edward Medical University, Lahore, Pakistan.

Correspondence: Nasir Farooq Butt. e-mail: nasirfarooq75@gmail.com

Reader has correctly mentioned that latest recommendations to detect *H. pylori* infection are to take multiple biopsies from two topographical locations, the antrum and the corpus of stomach to decrease false negative cases.⁴ Though there are many studies,^{5,6} including ours, in which only antral biopsies are used to detect *H. Pylori* but we fully agree with the readers' comments that it's better to take additional biopsies from corpus especially greater curvature to increase the sensitivity of the test.

References

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