

Obtaining slight changes for the detection of nonerosive reflux disease needs assistance from magnifying endoscopy with narrow-band imaging



To the Editor:

Nonerosive reflux disease (NERD) is a subtype of GERD that is difficult to identify because of negative endoscopic findings. Narrow-band imaging (NBI) may provide a solution to this problem. The randomized controlled trial by Desai et al¹ confirmed that the morphologic characteristics of intrapapillary capillary loops (IPCLs) detected by NBI were favorable for predicting NERD. However, most other studies have used magnifying endoscopy with NBI (ME-NBI) to detect the morphologic features of IPCL. Therefore, we have some doubts about this study.

IPCL is a papillary capillary loop in the esophageal mucosa. It can be clearly seen by ME-NBI, and it presents differently in inflammatory, tumor, and cancer states. Inasmuch as the changes in IPCLs are very subtle, it is difficult to detect these changes without using ME-NBI. Previous studies have shown that ME-NBI can clearly observe the minor lesions of esophageal mucosa in patients with NERD, such as increased quantity of IPCLs and bending expansion in IPCLs.^{2,3}

However, the type of endoscope used in this randomized controlled trial was not described and should be added. If ordinary endoscopy was used, the differences and commonalities for observing minor changes in IPCLs should be discussed. Moreover, tiny changes in IPCLs detected by ME-NBI reflect mild mucosal inflammation at the gastroesophageal junction, which may blur the distinction between NERD and mild esophagitis. Thus, distinguishing NERD patients with tiny IPCL changes from those with mild esophagitis is a problem worth discussing. All of these issues deserve further discussion and clarification.

DISCLOSURE

All authors disclosed no financial relationships.

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Corresponding author Kai Deng was supported by the National Natural Science Foundation of China (No. 81600511), Science Foundation of Sichuan Health and Family Planning Commission (No. 20PJY0314), Sichuan Science and Technology.

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<https://doi.org/10.1016/j.gie.2022.06.029>

Response:



We read the commentary from Deng et al¹ pertaining to our study of narrow-band imaging (NBI) for nonerosive reflux disease (NERD).² We thank the authors for their interest in our study findings and the use of NBI for the workup of NERD. In our study, we recognized and noted subtle and distinct features in the distal esophagus using NBI in the near-focus magnification mode.² As the authors acknowledge, several of these features (such as intrapapillary capillary loops) can be ascertained by the use of dual mode (normal and near focus) of currently available high-definition gastroscopes with second-generation NBI technology (ie, Olympus GIF-HQ-190) that were used in this study. We cited the use of dual-focus endoscopes (normal mode and near focus) in the methods and provided examples of high-quality images as a supplementary Figure 1. The utility of this methodology has been