The Importance for Proposing a Treatment for Laryngopharyngeal Reflux Disease Considering the Weakly Acid Pattern

Dear Editor,

We read the correspondence entitled: "Vonoprazan Fumarate: A Promising Therapeutic Option for the Rapid Relief of Laryngopharyngeal Reflux Disease." Authors compared vonoprazan fumarate *versus* esomeprazole in 140 patients with a suspected laryngopharyngeal reflux disease (LPRD). They showed that both groups demonstrated a significant decrease in the reflux symptom index (RSI) and reflux symptom score-12 (RSS-12) values after 4, 8, and 12 weeks of acid suppression therapy with comparable therapeutic response rates defined as ≥50% decrease in the RSI or RSS-12 values. We thank the authors for this interesting study. In this letter, we wish to draw attention to many points.

Authors considered that RSS-12 > 11, RSI > 13, and reflux finding score (RFS) > 7 indicated a LPRD diagnosis. This empirical approach is associated with a high sensitivity but moderate specificity for the LPRD diagnosis.^{2,3} The current gold standard for LPRD diagnosis is the demonstration of > 1 pharyngeal reflux events at the 24-hour hypopharyngeal-esophageal multichannel intraluminal impedance-pH testing (HEMII-pH).^{4,5} Most studies demonstrated predominantly weakly acidic or alkaline reflux,^{6,7} which may explain the lack of proton pump inhibitor (PPI) superiority over placebo. 8,9 Therefore, the equivalent therapeutic response rates at 12 weeks posttreatment may suggest that vonoprazan fumarate did not exceed esomeprazole's pharmacological effectiveness. Meta-analyses of PPI efficacy versus placebo suggested that symptom reduction in suspected LPRD patients may be influenced by confounding factors, including dietary modifications, lifestyle changes, and placebo effects.^{8,9} In the present study, authors recommended a strict anti-reflux diet by reducing their intake of high-sugar and high-fat foods, strong tea, carbonated beverages, and overeating, and lifestyle changes. Although PPIs and vonoprazan may be effective on acid LPRD, patients with weakly acidic or alkaline reflux and low response to these medications may benefit from anti-reflux dietary interventions. This possibility of confounding factor makes particularly sense considering the pharmacological effect of these drugs. Indeed, acid suppression increases gastric and refluxate pH; however, since most pharyngeal reflux events are already weakly acidic or alkaline, acid-suppressing therapy benefits only acid LPRD patients.¹⁰

The authors excluded patients with chronic cough or dysphonia unrelated to LPRD. However, without HEMIIpH testing, determining whether these symptoms are independent of or partially attributable to pharyngeal reflux events remains challenging.

Although this study presents novel findings regarding vonoprazan fumarate effectiveness, future investigations comparing vonoprazan fumarate to alginates and antacids (magaldrate) are mandated, while controlling confounding variables, particularly dietary and lifestyle modifications affecting symptom improvement.

Declaration of Competing Interest

I undersigned, Jérôme R. Lechien, certify on behalf of all co-authors that the work has not been published previously or submitted elsewhere for review. Authors have no financial interest in the subject under discussion. All authors have read and approved the manuscript.

Acknowledgments

None.

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https://doi.org/10.1016/j.jvoice.2025.02.029

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Journal of Voice, Vol 39, No 4, pp. 860–861 Available online 5 March 2025 0892-1997

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