

Vonoprazan- making a case for Functional Dyspepsia

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Ma'am, Vonoprazan is a potent acid suppressant classified as a potassium-competitive acid blocker (P-CAB). These novel drugs bind reversibly to K⁺ ions and block the H⁺/K⁺ ATPase enzyme, preventing gastric acid production.¹ Vonoprazan is mainly indicated in the management of gastro-oesophageal reflux disease (GORD), reflux esophagitis and as a constituent of Helicobacter pylori eradication regimen. It has gained tremendous traction, mainly due to its faster onset of action and consistent acid suppression. Another advantage is its non-interaction with CYP enzymes—a valuable attribute when prescribing drugs to patients on polypharmacy. However, being marketed only a couple of years ago, there's a lot to learn about the drug.

A recent study conducted by Shinozaki et al., published in 2023, validated vonoprazan's effectiveness in treating functional dyspepsia (FD).² Prior to this, vonoprazan's role in FD treatment had not been clearly established. While it was already known as an effective treatment for acid-related disorders, this study has expanded its potential applications. Specifically, the study compared the efficacy of vonoprazan with acotiamide (a prokinetic agent) in patients with functional dyspepsia without heartburn. The results showed that both treatments led to significant improvements in functional dyspepsia scores ($p < 0.001$). Moreover, the reduction in scores (55% vs. 59%, $p = 0.559$) and the resolution rates (21% vs. 30%, $p = 0.345$) were similar between the two groups.² These findings support the case for using vonoprazan in patients with functional dyspepsia.

This finding can have substantial implications in the field of medicine across the globe as the treatment of the concerned disorder remains limited; owing to the complex nature of its aetiology. Therefore, any new insights into managing this already challenging condition

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could be valuable in helping physicians provide better care.

In Pakistan, the prevalence of Functional Gastrointestinal Disorders is notably high, largely due to poor dietary habits, sedentary lifestyles, and psychological stress within the population. A cross-sectional study conducted in Karachi found that 468 out of 860 participants (54.4%) were diagnosed with functional gastrointestinal disorders.³ Among these, Functional Dyspepsia was the most prevalent (70.2%).³ Although physicians in Pakistan are already prescribing prokinetic agents, PPIs, simethicone etc. for managing functional dyspepsia, vonoprazan may serve as an effective alternative—particularly for patients in whom existing therapies prove ineffective Especially given that vonoprazan's safety profile is comparable to those for PPIs.⁴ Physicians also need to make sure that the patients understand the dire need for lifestyle modifications to improve functional disorder-related symptoms before resorting to pharmacologic treatments.

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