

Optimizing Gastroesophageal Reflux Disease treatment: A call to shift from omeprazole

Muhammad Bilal Sardar¹, Muhammad Babar²

Dear Madam, Gastroesophageal reflux disease (GERD) is a disorder of the gastro-intestinal tract, which develops due to the regurgitation of acid from the stomach into the oesophagus. If left untreated, GERD may cause serious complications such as Barrett's oesophagus, oesophageal strictures, and oesophageal adenocarcinoma. According to a study published by Nirwan JS et al in 2020, individuals suffering from Gastroesophageal reflux disease globally is 1.03 billion.¹

Proton pump inhibitors (PPIs) are frequently used drugs for the treatment of GERD. Omeprazole belongs to PPIs class of drugs and it has been a drug of choice for GERD because it is affordable, easily available, and it can be taken along with other medicines. However, Proton pump inhibitors are not completely risk-free, chronic use of Proton Pump inhibitors has been associated with decreased calcium and magnesium absorption increasing the risk of osteoporosis and electrolyte disturbances respectively. It also increases the risk of community-acquired pneumonia.²

However, Esomeprazole the s-isomer of omeprazole yields much better results than omeprazole. It is more effective and safe in the treatment of GERD, not only does it decrease the symptoms of the disease rapidly ie. heartburn⁴ but also it reduces the relapse of the symptoms twice that of omeprazole. Maintenance of intragastric pH > 4 is an effective measure for the management of gastroesophageal reflux disease, esomeprazole has demonstrated improved acid inhibition over omeprazole with a high mean percentage of 24-hour intragastric pH > 4. The healing rate for reflux esophagitis and relapse was also higher for esomeprazole than that of omeprazole.³

¹3rd Year MBBS Student, Allama Iqbal Medical College, Lahore, Pakistan;

²Department of Emergency Medicine, Social Security Hospital, Faisalabad, Pakistan.

Correspondence: Muhammad Bilal Sardar. e-mail: bilalsardar508@gmail.com

ORCID ID: 0009-0009-3995-3574

Submission complete: 18-12-2023

Review began: 06-03-2024

Acceptance: 31-05-2024

Review end: 25-05-2024

According to a study, the number of individuals with GERD in the South Asia region is around 8000 per 100000.⁴ Knowing the extent of Gastroesophageal patients present in Pakistan and how rapidly this number can escalate due to poor lifestyle modifications. Omeprazole which is the most frequent drug prescribed for the treatment of GERD⁵ should be discouraged and Esomeprazole being more beneficial in terms of healing time and relapse of symptoms should be promoted to prevent chronic use adverse effects of Proton pump inhibitors. Overall, such a measure will improve the quality of life of a person suffering from gastroesophageal reflux disease which otherwise may lead to more severe implications.

Disclaimer: None.

Conflict of Interest: None.

Funding Disclosure: None.

DOI: <https://doi.org/10.47391/JPMA.11456>

References

1. Nirwan JS, Hasan SS, Babar ZU, Conway BR, Ghori MU. Global Prevalence and Risk Factors of Gastro-oesophageal Reflux Disease (GORD): Systematic Review with Meta-analysis. *Sci Rep* 2020;10:5814. doi: 10.1038/s41598-020-62795-1
2. Lehault WB, Hughes DM. Review of the Long-Term Effects of Proton Pump Inhibitors. *Fed Pract* 2017;34:19-23.
3. Zheng RN. Comparative study of omeprazole, lansoprazole, pantoprazole and esomeprazole for symptom relief in patients with reflux esophagitis. *World J Gastroenterol* 2009;15:990-5. doi: 10.3748/wjg.15.990
4. GBD 2017 Gastro-oesophageal Reflux Disease Collaborators. The global, regional, and national burden of gastro-oesophageal reflux disease in 195 countries and territories, 1990-2017: a systematic analysis for the Global Burden of Disease Study 2017. *Lancet Gastroenterol Hepatol* 2020;5:561-81. doi: 10.1016/S2468-1253(19)30408-X.
5. Shanika LGT, Reynolds A, Pattison S, Braund R. Proton pump inhibitor use: systematic review of global trends and practices. *Eur J Clin Pharmacol* 2023;79:1159-72. doi: 10.1007/s00228-023-03534-z

Author Contribution:

MBS: Data analysis and writing.

MB: Data collection.