

Are all proton pump inhibitors equal in their short- and long-term perspective

Kjell Andersson

Preclinical Research & Development, AstraZeneca, R&D Mölndal, Sweden

It was not until the introduction of H₂ antagonists that patients suffering from gastro-oesophageal reflux disease (GERD) were offered any effective pharmacological help. Roughly 50% of patients had their erosive oesophagitis (EE) healed after an 8 weeks treatment period. With the appearance of more potent acid inhibitors it has been possible to raise the standards regarding clinical outcome for patients with GERD. It is well known that there is a good correlation between healing of EE and time with intragastric pH above 4 (1). Esomeprazole has in several studies been compared with all members of the proton pump inhibitors (PPIs) class (omeprazole, lansoprazole, pantoprazole and rabeprazole) regarding their ability to raise intragastric pH above 4. It has consistently been shown that esomeprazole is superior to the others in keeping a high pH for longer time. In a recent five-way crossover study this was again confirmed (2). Also when comparing intravenous infusion over a five day treatment period,

esomeprazole was found to provide more effective control of intragastric pH than pantoprazole (3).

To patients, the most relevant endpoint is relief of symptoms. In some very large clinical studies esomeprazole has been compared with omeprazole, lansoprazole and pantoprazole in their ability to control symptoms. Regarding time to sustained symptom control as well as percentage of patients kept without symptoms during treatment, esomeprazole was found to be most effective. As previously mentioned, healing of EE correlates well with control of gastric acidity. Based on its superiority in controlling intragastric pH esomeprazole should be more effective also in healing of EE. In two large clinical studies comprising more than 2,700 patients, esomeprazole was shown to be significantly superior to omeprazole (4). In another major clinical study (n = 5,240), esomeprazole was compared to lansoprazole in their ability to heal EE.

Prof. Kjell Andersson, Dr. Pharm.,
Director and Scientific Adviser, GI Pharmacology
Preclinical Research & Development, AstraZeneca
R&D Mölndal, Sweden
Affiliated to the Department of Pharmacology
University of Lund, Sweden
Phone: +46 31 7761000
E-mail: kjell.andersson@astrazeneca.com

It was found that esomeprazole was more effective over the whole range of EE (LA grade A–D). In the more severe cases (grades C–D), esomeprazole was shown to heal approximately 15% more of the patients (5). Recently, similar data was reported from another major study (n = 3,151) comparing esomeprazole with pantoprazole (6). In a recent metaanalysis comparing the efficacy of omeprazole to heal EE during an 8-week treatment course with other available effective acid inhibitors, the only drug shown to be significantly superior was esomeprazole (7).

To keep patients in remission following healing, maintenance treatment is necessary in most patients. Following healing, esomeprazole has been shown to keep more patients in remission and more patients free from symptoms during 6 months maintenance treatment compared with lansoprazole (8) and to pantoprazole (9). In both studies greater consistency of maintenance treatment was seen across all grades of oesophagitis with esomeprazole.

In patient suffering from nonerosive reflux disease (NERD) PPIs have been shown to be superior to H₂ antagonists in controlling symptoms. Only few studies have been performed to compare the efficacy of the different PPIs in this group of patients and there is currently no evidence for any difference in efficacy.

In conclusion, when comparing the PPIs in standard doses, esomeprazole is more effective compared with any other PPI in the management of EE. In management of NERD, PPIs is the treatment of choice but no difference has been observed between them.

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