Assessment of Patients Satisfaction with Proton Pump Inhibitors Amongst Subjects at RIMS, Ranchi

Abha Kumari¹, Sandeep Kumar²

¹Associate Professor, Department of Pharmacology, Rajendra Institute of Medical Sciences, Ranchi, Jharkhand, India.
²Associate Professor, Department of ENT, Rajendra Institute of Medical Sciences, Ranchi, Jharkhand, India.

ABSTRACT
Background: The proton-pump inhibitors are efficient inhibitors of secretion of gastric acid. Subjects infected with Helicobacter pylori, these drugs can cause corpus-predominant gastritis, which is commonly found in the mucosa amongst patients with gastric cancer. The efficiency and safety of therapy with proton pump inhibitors treatment has been inconclusive, therefore there is a need to perform additional studies on pharmacological action of proton pump inhibitors. The present study was aimed at determining the patient satisfaction with the use of proton pump inhibitors.

Materials and Methods: The prospective observational study was conducted for a period of 8 months at RIMS, Ranchi. Pregnant patients and patients with allergies were excluded from the study. The demographic details of all the subjects were recorded. A complete and detailed examination of all the subjects was performed. Side effects occurring with the proton pump inhibitors were also noted. These were detected by questioning the subjects. The cost of treatment was also questioned. All the data was arranged in a tabulated form and analyzed using SPSS software.

Results: There were a total of 60 males and 40 females in the study. Out of which 26 males and 27 females had gastritis. There were 11 subjects who had rashes after intravenous administration. According to 61 subjects the proton pump inhibitors gave complete relief. As per 39 subjects they were partially satisfied by this statement. Symptoms are completely under control was believed by 43 subjects.

Conclusion: Proton pump inhibitors efficiently inhibit the secretion of gastric acid in the stomach. The patients enrolled in the study were satisfied by the action of PPIs.

Keywords: Helicobacter, Inhibitors, Proton Pump.

*Correspondence to:
Dr. Sandeep Kumar,
Associate Professor,
Department of ENT,
RIMS, Ranchi, Jharkhand, India.

Article History:
Received: 03-07-2018. Revised: 01-08-2018. Accepted: 23-08-2018

INTRODUCTION
The proton-pump inhibitors are efficient inhibitors of secretion of gastric acid. They work effectively when the parietal cells are stimulated to produce acid after meals, therefore they should be administered only before meals. Because the level of hydrogen potassium ATPase existing in the parietal cell is maximum after prolonged fasting, these inhibitors should be given before the first meal of the day. In majority of the individuals, once-daily dose is sufficient to yield the desired level of acid inhibition, and a second dose, if required, should be given before the evening meal. Proton pump inhibitors should not be concurrently given with H₂ antagonists, somatostatin analogues, or other anti-secretory agents as they reduce their acid inhibitory action when given simultaneously. There should be sufficient time interval between administration of a proton pump inhibitor and H₂ antagonist. H₂ antagonist can be administered at night by subjects who have heartburn after taking proton pump inhibitor in the morning.¹ ²

Subjects infected with Helicobacter pylori, these drugs can cause corpus-predominant gastritis, which is commonly found in the mucosa amongst patients with gastric cancer. The efficiency and safety of therapy with proton pump inhibitors treatment has been inconclusive, therefore there is a need to perform additional studies on pharmacological action of proton pump inhibitors.³ These drugs inhibit the gastric acid production and secretion, and are the most commonly arranged drugs for management of symptoms of the upper gastrointestinal tract.³ ⁴ The proton pump inhibitors have been used since long without any major side effects.³ The present study was aimed at determining the patient satisfaction with the use of proton pump inhibitors.

MATERIALS AND METHODS
The prospective observational study was conducted for a period of 8 months at RIMS, Ranchi. The study was approved by the
institutional ethical committee and all the subjects were informed about the study and a written consent was obtained from them in
their vernacular language. A total of 100 subjects, more than 18
years of age were included in the study. Pregnant patients and
patients with allergies with allergies were excluded from the study.
The demographic details of all the subjects were recorded. A
complete and detailed examination of all the subjects was
performed. The required investigations were performed to reach to
an appropriate diagnosis. Patients were prescribed proton pump
inhibitors- once daily morning dose. A pretested satisfaction
proforma was used to assess the level of patient satisfaction. It
was in their vernacular language. The subjects were made to rate
on a scale of 4, ranging between dissatisfied and completely
satisfied. Side effects occurring with the proton pump inhibitors
were also noted. These were detected by questioning
the subjects. The cost of treatment was also questioned. All
the data was arranged in a tabulated form and analyzed using
SPSS software.

<table>
<thead>
<tr>
<th>Table 1: Distribution of the subjects based on the diagnosis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diagnosis</td>
</tr>
<tr>
<td>-------------------</td>
</tr>
<tr>
<td>Gastritis</td>
</tr>
<tr>
<td>Liver disease</td>
</tr>
<tr>
<td>Hepatitis</td>
</tr>
<tr>
<td>Pancreatitis</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Table 2: Side effects of pantoprazole</th>
</tr>
</thead>
<tbody>
<tr>
<td>Side effects</td>
</tr>
<tr>
<td>--------------------</td>
</tr>
<tr>
<td>Rashes</td>
</tr>
<tr>
<td>Dizziness</td>
</tr>
<tr>
<td>Nausea</td>
</tr>
<tr>
<td>Vomiting</td>
</tr>
<tr>
<td>Itching</td>
</tr>
<tr>
<td>Abdominal pain</td>
</tr>
<tr>
<td>Flatulence</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Table 3: Satisfaction of subjects with proton pump inhibitors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Questions</td>
</tr>
<tr>
<td>-------------------------------------------------</td>
</tr>
<tr>
<td>Medication gives me complete relief</td>
</tr>
<tr>
<td>Symptoms are completely under control</td>
</tr>
<tr>
<td>Medicine provides immediate symptom relief</td>
</tr>
<tr>
<td>Medication allows me to do everything I want to do</td>
</tr>
<tr>
<td>Medication allows me to eat or drink anything I want</td>
</tr>
<tr>
<td>Comfortable requesting specific medications from my physician</td>
</tr>
<tr>
<td>Amount of money I pay for my medication</td>
</tr>
<tr>
<td>Side effects I have with my medication</td>
</tr>
<tr>
<td>Take my medication only when I have symptoms</td>
</tr>
</tbody>
</table>

RESULTS
Table 1 shows the distribution of the subjects according to
diagnosis. There were a total of 60 males and 40 females in the
study. Out of which 26 males and 27 females had gastritis. There
were 21 males and 5 females with liver disease. Hepatitis was
encountered by 8 males and 4 females. Rest of the 5 males and 4
females had pancreatitis. Table 2 demonstrates the side effects of
pantoprazole encountered by the subjects. There were 11
subjects who had rashes after intravenous administration. 3
subjects had nausea and 4 had vomiting after intravenous use of
pantoprazole. There were 4 patients of abdominal pain and 6 of
flatulence after oral administration of pantoprazole. There was 1
subject who had dizziness. Table 3 illustrates the satisfaction of
subjects with proton pump inhibitors. According to 61 subjects the
proton pump inhibitors gave complete relief. As per 39 subjects
they were partially satisfied by this statement. Symptoms are
completely under control was believed by 43 subjects. 9 subjects
had neutral reaction towards this statement. There were 3
subjects who thought that medication didn’t provide immediate
symptom relief. 18 subjects had neutral reaction towards this
statement. 50 subjects thought that immediate relief is provided by
the medication. 40 subjects thought that medication allows them
to eat or drink anything they want. There were 46 subjects who
took medications when they had symptoms. There were 31
who had neutral reaction to the statement. There were 8 subjects
who were not comfortable requesting for specific medications from
the physician.
DISCUSSION
Gastric acid is an important part in the pathophysiology of gastroesophageal reflux syndrome and peptic ulcer disorder, and proton pump inhibitors have been used since indefinite because of their efficacy relieving symptoms and preventing complications of both these disorders.9,10
Proton pump inhibitors have fewer adverse effects. The few common ones are nausea, pain, constipation, flatulence, and diarrhea. In our study, there were 11 subjects who had rashes after intravenous administration. 3 subjects had nausea and 4 had vomiting after intravenous use of pantoprazole. There were 4 patients of abdominal pain and 6 of flatulence after oral administration of pantoprazole. There was 1 subject who had dizziness. Symptoms like myopathy, rashes, arthralgias and headaches, and rashes have also been observed.
In our study, according to 61 subjects the proton pump inhibitors gave complete relief. As per 39 subjects they were partially satisfied by this statement. Symptoms are completely under control was believed by 43 subjects. 9 subjects had neutral reaction towards this statement. There were 3 subjects who thought that medication didn’t provide immediate symptom relief. 18 subjects had neutral reaction towards this statement. 50 subjects thought that immediate relief is provided by the medication. 40 subjects thought that medication allows them to eat or drink anything they want. There were 46 subjects who took medications when they had symptoms. There were 31 who had neutral reaction to the statement. There were 8 subjects who were not comfortable requesting for specific medications from the physician.
According to a study performed by Chey et al. around 64.6 % were completely satisfied with the use of proton pump inhibitors.11 In their study, there was a significant difference amongst male and female in the satisfaction index, when compared by Chi square test.
Whereas according to a study conducted by Mathews et al. there were 68 % of males and 61.1 % of females were “very” or “completely” satisfied with their therapy with proton pump inhibitors. Pantoprazole has improved health-related quality of life more efficiently as compared to H₂ antagonists and has shown similar efficacy compared to other proton pump inhibitors. Patients consuming pantoprazole in the amount 40 mg/d had greater amount of symptom relief. The satisfaction rate amongst patients in trial involving proton pump inhibitors aimed at estimating health-related quality of life. Pantoprazole is efficient in controlling symptoms associated with acid-related disorders and improving quality of life.12

CONCLUSION
Gastroesophageal reflux disease and peptic ulcer disorder are becoming a common lifestyle disorders. Many of the todays population is affected by it. Proton pump inhibitors efficiently inhibit the secretion of gastric acid in the stomach. The patients enrolled in the study were satisfied by the action of PPIs.

REFERENCES