

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

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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 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.

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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.¹⁻⁴

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.⁵ 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.^{6,7} The proton pump inhibitors have been used since long without any major side effects.⁸ 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 1: Distribution of the subjects based on the diagnosis

Diagnosis	Male (n=60)	Female (n=40)
Gastritis	26	27
Liver disease	21	5
Hepatitis	8	4
pancreatitis	5	4

Table 2: Side effects of pantoprazole

Side effects	No. of patients	Dosage form
Rashes	11	intravenous
Dizziness	1	intravenous
Nausea	3	intravenous
Vomiting	4	intravenous
Itching	2	intravenous
Abdominal pain	4	orally
Flatulence	6	orally

Table 3: Satisfaction of subjects with proton pump inhibitors

Questions	Dissatisfied	Neutral	Partially satisfied	Completely satisfied
Medication gives me complete relief	0	0	39	61
Symptoms are completely under control	0	9	48	43
Medicine provides immediate symptom relief	3	18	29	50
Medication allows me to do everything I want to do	0	15	30	55
Medication allows me to eat or drink anything I want	3	18	39	40
Comfortable requesting specific medications from my physician	8	28	20	51
Amount of money I pay for my medication	0	7	57	36
Side effects I have with my medication	9	11	36	44
Take my medication only when I have symptoms	0	31	23	46

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 gastro esophageal 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 today's 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.

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