

Effectiveness of using Panocid® in the treatment of gastroesophageal reflux disease

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Gastroesophageal reflux disease (GERD) is a chronic relapsing disease caused by the retrograde flow of gastric contents into the esophagus. In the developed countries of the world, GERD incidence reaches 30-40% among the adult population and has a tendency to increase [11, 13].

The main cause of GERD is accelerated spontaneous relaxation of the lower esophageal sphincter due to the following reasons:

- esophageal dyskinesia;
- systemic scleroderma;
- a large amount of air is swallowed when eating too fast. This leads to an increase in intragastric pressure;
- flatulence;
- peptic ulcer disease (especially localized in the duodenum);
- duodenostasis of various etiologies;
- excessive consumption of fatty meat, refractory fats (lard), flour products (pasta, vermicelli, bread), fried foods [1, 5].

In the pathogenesis of GERD, the following is important:

1. Rejection of stomach contents containing aggressive factors: HCl, pepsin, bile acids in duodenogastric reflux.
2. Long-term contact of aggressive factors with the mucous membrane of the esophagus due to a decrease in the activity of esophageal clearance as a result:

- esophageal dysmotility;
- dysfunction of the salivary glands, which is contributed by old age, esophagitis, functional and organic pathology of the central nervous system, endocrine diseases (diabetes mellitus, thyrotoxicosis), systemic scleroderma, Sjogren's syndrome, radiation therapy.

1. A decrease in the resistance of the mucous membrane of the esophagus due to:
 - dysfunction of the glands of the submucosa of the esophagus, which leads to insufficient production of mucin, non-mucin proteins, bicarbonates, PGE₁;
 - disorder of the regeneration of the esophageal mucosa as a result of a decrease in epithelial protection and destabilization of hemocirculation, tissue acid alkaline balance [3, 6].

The urgency of the GERD problem lies in the development of complications dangerous to the health and life of patients: esophageal peptic ulcer, esophageal stricture, Barrett's esophagus, adenocarcinoma [2, 8, 12].

In this regard, timely pharmacotherapy using modern and effective drugs is of great importance to avoid the above-mentioned complications. Today, proton pump inhibitors (PPIs) are the mainstay of treatment for GERD. They reduce basal and stimulated gastric secretion due to the inhibition

of H⁺/K⁺ – ATPase, which is necessary for the transport of hydrogen ions from the parietal cells of the gastric mucosa into its lumen [4, 7, 9].

The purpose of our research was to study the efficacy of Panocid® (pantoprazole 40 mg) manufactured by Ananta Medicare Ltd. (United Kingdom) for the treatment of GERD.

Given the long period of treatment with proton pump inhibitors, it is necessary to note the importance of the economic component of therapy – Panocid® belongs to the category of drugs available to a wide range of patients. The research was conducted on the basis of the therapeutic and gastroenterological department of the State institution "Departmental Clinical Hospital of St. Simferopol State Enterprise "Prydniprovskaya Zaliznytsia".

Materials and methods

A total of 55 people (35 men and 20 women aged 35 to 56 years) with GERD diagnosed on the basis of clinical, endoscopic and morphological research methods were examined. An X-ray of the esophagus and stomach was also performed. At the same time, 20 patients with GERD stage 1 (according to Savary-Miller), 15 with GERD stage 2, and 10 with GERD stage 3 were diagnosed.

The frequency of clinical symptoms of GERD is presented in the table. Esophageal symptoms dominated the clinical picture of the disease.

The most common symptom was heartburn, which occurred mainly once a week (51%), less often it occurred once a month (31%), or daily (18%). In many patients, the occurrence of heartburn was associated with a horizontal body position after eating or when leaning forward and physical exertion (64, 38, and 34%, respectively).

Burping was quite often observed. A sour taste in the mouth was mainly observed (45%), and a bitter taste in the mouth was less often observed (9%).

Symptoms of regurgitation rarely appeared; they were absent in 73% of patients. Dysphagia, pain on swallowing, hiccups, and vomiting occurred in a small percentage of cases – 11.4% and 9%, respectively.

Observed extracardiac manifestations were expressed in the form of aching pain in the region of the heart (11%), rare supraventricular extrasystole (7%). In addition, chronic posthemorrhagic iron deficiency anemia developed (14%). It was explained by occult bleeding due to erosive processes in the esophageal mucosa.

Panocid® was prescribed at a dose of 40 mg/day for 28 days, followed by control endoscopy and gastrobiopsy. The criteria for the effectiveness of the therapy were as follows: cessation of clinical symptoms of the disease, normalization of the endoscopic picture and the morphological structure of the mucous membrane of the distal part of the esophagus.

Results and discussion

In the course of the therapy, a significant improvement in the subjective well-being of the patients was observed. On the 2nd-3rd day of treatment, a significant decrease in the frequency and intensity of heartburn was observed in 65% of patients. 80% of patients had no belching, regurgitation, dysphagia, and pain when swallowing, and sternum pain and chest pain stopped, and heart rhythm normalized, which was confirmed by daily ECG monitoring. On the 8th-9th day from the start of treatment with Panocid®, esophageal and extraesophageal symptoms of the disease completely stopped in all subjects. During endoscopic examination, 100% of patients with GERD stage 1 and 2 have no erosive changes in the mucous membrane of the distal part of the esophagus and no inflammatory edema. Only in 5% of patients with GERD stage 3, instead of draining erosions, which occupied the entire surface of the mucous membrane of the distal part of the esophagus, single erosions were reported. Complete healing of erosions occurred from 4 to 8 weeks of treatment. In the control biopsy material, normalization was reported in 85% of the examined patients, and a significant improvement in the morphological manifestations of the disease – in 15%.

During treatment with Panocid®, no clinically significant interaction with other drugs used in complex treatment was reported. This is due to the fact that Panocid® has a lower affinity to the cytochrome P450 system than other PPI molecules [14]. Adverse reactions during Panocid® therapy were not reported.

Conclusions

Based on the obtained results, it can be concluded that Panocid® is a highly effective agent for the treatment of GERD. It accelerates the healing of defects of the esophagus mucosa, eliminating the clinical manifestations of the disease. The obtained results provide a basis for its widespread use in clinical practice as a first-line drug.

Symptoms	Number of patients with a percentage ratio (indicated in brackets)
Heartburn:	
Daily	10 (18)
Once a week	28 (51)
Once a month	17 (31)
after meals:	
in a horizontal body position	35 (64)
at night	7 (13)
when leaning forward	21 (38)
physical exertion	19 (34)
Pain:	
in the lower third of the sternum	6 (11)
in epigastric region	2 (4)
burning pain	5 (9)
squeezing pain	2 (4)
constant pressing pain	–
before meals	–
after meals	4 (7)
at night	4 (7)
Regurgitation:	
after meals	7 (13)
regurgitation with food	1 (2)
sour taste in the mouth	5 (9)
bitter taste in the mouth	4 (9)
no regurgitation	40 (73)
in a horizontal body position	4 (7)
when leaning forward and physical exertion	15 (27)
Dysphagia	
Pain when swallowing food	2 (4)
Burp:	
sour	25 (45)
bitter	5 (9)
Hiccups and vomiting	
	5 (9)
Extraesophageal symptoms:	
aching pain in the heart region	6 (11)
supraventricular extrasystole	4 (7)
Chronic posthemorrhagic iron deficiency anemia	
	8 (14)

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