CLINICAL CURATIVE EFFECT OBSERVATION AND NURSING EXPERIENCE OF TREATMENT OF GASTROESOPHAGEAL REFLUX DISEASE WITH ESOMEPRAZOLE COMBINED WITH ITOPRIDE

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ABSTRACT

Objective: To investigate efficacy and safety of treatment of gastroesophageal reflux disease with esomeprazole combined with itopride.

Method: 72 cases of gastroesophageal reflux disease patients that met the inclusion criteria were randomly divided into two groups, with 40 cases in treatment group and 32 cases in control group. There was no significant difference in age and sex of the two groups (P> 0.05). The treatment group was treated with esomeprazole + itopride, while the control group was treated with esomeprazole + domperidone. Course of treatment ran 4 weeks. The clinical efficacy and safety were observed.

Result: Clinical remission rate and recurrence rate of treatment of gastroesophageal reflux disease with esomeprazole combined with itopride are superior to the control group, and itopride brought no significant adverse reactions.

Conclusion: Esomeprazole combined with itopride is an ideal drug for treatment of gastroesophageal reflux disease, safe and reliable and with less adverse reactions.

Keywords: Gastroesophageal Reflux Disease Esomeprazole Itopride.

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Introduction

Gastroesophageal reflux disease (GERD) refers to a disease causing heartburn, sour regurgitation and (or) complications after gastroduodenal contents reflux in esophagus. GERD is a common chronic disease. With the advancing science and technology and changing people’s lifestyle and diet structure, its incidence increases year by year; prone to relapse, missed diagnosis and misdiagnosis, it seriously affects patients’ quality of life and causes heavy economic and social burden(1).

In this paper, esomeprazole and itopride combined with comprehensive treatment such as mental nursing are taken for comprehensive treatment of gastroesophageal reflux disease, in order to find ideal drug and method for quick symptom relief and recurrence reduction.

Materials and methods

Case Selection

According to 2013 “China Digestive Diseases Treatment Guidelines and Consensus Compilation (Fourth Edition). GERD Consensus”(2), inclusion criteria include:

- Persistent or recurrent episodes of heartburn, reflux and other symptoms. Duration runs more than 8 weeks;
- Aged 18-65 years, male or female;
- Diagnosed as gastroesophageal reflux disease with endoscopy, 24h esophageal pH monitoring;
- Without infectious esophagitis, peptic ulcer, gastrointestinal cancer, positive helicobacter pylori;
- Without cardiovascular, kidney and other serious primary diseases;
• Except pregnant or lactating women, alcoholics, mentally ill patients;
• Without use history of antacids, prokinetic agents two weeks before medication. A total of 72 patients were included.

Treatment Method
72 patients were randomly divided into two groups. Treatment group (n = 40) took 20 mg esomeprazole (AstraZeneca Pharmaceutical Co., Ltd) 2 times a day, 30min before breakfast and supper, and 50mg itopride hydrochloride (Abbott Pharmaceutical Co., Ltd.) 3 times a day, 30 min before breakfast, lunch and supper; the control group (n = 32) took 20mg esomeprazole (AstraZeneca Pharmaceutical Co., Ltd), 2 times a day, 30 min before breakfast and supper and10mg domperidone (Xian Janssen Pharmaceutical Co., Ltd.), 3 times a day, 30min before breakfast, lunch and supper. Course of treatment ran 4 weeks.

Nursing Care
Diet nursing Bland diet easy to be digested is appropriate, eat more fresh fruits and vegetables, eat small meals. Avoid high-fat, spicy, stimulating, too sweet, salty foods, avoid satiation, quit alcohol. Advise patients to avoid lying on the back within 30 min after eating, and try to remain standing position. When patients take bed rest, pillow can be raised 10-20 cm, which can effectively prevent or relieve gastroesophageal reflux.

Specialist Care
Closely observe state of illness Closely observe vital signs, mental state and state consciousness; vomiting quantity, color, character, times and whether there is presence of accompanying symptoms; skin nail bed limb color temperature, pay attention to keep warm.

Nursing of indwelling gastric acid pH monitoring tube Maintain oral hygiene of patients, do a good job in oral care; pay attention to observe nasal cavity with intubation, drop paroline in nasal cavity with intubation every day in order to alleviate damage of gastric acid monitoring tube to nasal mucosa.

Maintain gastric acid monitoring tube unobstructed, properly fix gastric acid monitoring tube, and observe external retention length of gastric acid monitoring tube every day.
Closely observe color, nature, amount of gastric juice. Gastric juice is generally dark green. In case of color change in gastric juice, it should be promptly reported to the doctor for appropriate treatment.

Medication care Explain drug-related knowledge, inform patients of drug using method, so that patients grasp accurate medication time in order to obtain the best curative effect.

Psychological care
Closely observe psychological condition of patients: Gastroesophageal reflux disease is a chronic disease. Disturbed by reflux heartburn chest pain chest tightness and other problems, patients are prone to nervousness, anxiety, irritability and other negative emotions. The psychological state will exacerbate the disease to some extent, and even make patients lose confidence in treatment. Nurses should provide companionship, increase patients’ security and maintain emotional stability.

Do a job in health education of the disease: Instruct patients to have regular life and correct unhealthy lifestyles in a timely manner. Patiently explain to patients and their families a variety of examinations as well as therapeutic purposes to gain patients’ cooperation. Introduce examples of successful therapy to patients to help them build confidence to overcome the disease.

Observation Index
Take clinical symptoms before and after treatment, 24 h esophageal pH monitoring and relapse of symptoms after 6 months of treatment as observation indexes. At the same time, monitor liver and kidney function, three routine items and adverse drug reactions before and after treatment.

Curative Effect Criterion
Clinical Efficacy Criterion
• Markedly: The symptoms and signs are significantly improved, 24 h esophageal pH monitoring is negative, symptom score decreases ≥80%;
• Effective: The symptoms and signs are improved, 24 h esophageal pH monitoring is negative, symptom score decreases ≥50%;
• Invalid: The symptoms and signs are not improved or worsen, 24 h esophageal pH monitoring is positive, symptom score decreases<50%. The total effective rate = number of (markedly+ effective) cases / total cases × 100%.

End-of-dose failure: Pay follow-up visits to markedly, effective patient for 6 months. In case of recurrence of symptoms, perform endoscopy, 24h esophageal pH monitoring test, etc. immediately.
Statistical Method

All data were statistically analyzed with SPSS18.0. Count data is denoted by rate (%) and tested by \( \chi^2 \) test, wherein \( p < 0.05 \), with significant difference, statistically significant.

Results

Curative effect after treatment is shown in Table 1.

<table>
<thead>
<tr>
<th>Group</th>
<th>Markedly Effective</th>
<th>Invalid</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control group</td>
<td>22/32(68.75)</td>
<td>7/32(21.88)</td>
</tr>
<tr>
<td>Treatment group</td>
<td>33/40(82.5)*</td>
<td>5/40(12.5)</td>
</tr>
</tbody>
</table>

Table 1 Curative effect after treatment. * Compared with control group, \( p < 0.05 \)

End-of-Dose Failure

Pay follow-up visits to markedly, effective patients for 6 months. Treatment group has 3 cases of recurrence (7.5%); 32 cases of control group has 5 cases of recurrence (15.63%).

Discussion

GERD is a common chronic disease and frequently-occurring disease in digestive system, which belongs to acid-related disease, more common in the elderly, obesity and population with high fat intake. Its incidence shows an increasing trend year by year\(^5\).

Currently, it is believed that its etiology and pathogenesis concern the following aspects\(^1,3,4\):

- Lower esophageal sphincter (LES) is loose, with anti-reflux barrier function reduced;
- Esophageal peristalsis ability is reduced, esophageal acid clearance capacity is decreased;
- Because of damage to esophageal mucosa itself and reflux material, esophageal barrier function is damaged;
- Gastroduodenal dysfunction and delayed gastric emptying result in increased quality and quantity of reflux material. Therefore, the principles of treating GERD are to reduce gastroduodenal reflux, reduce acidity of reflux material, increase reactivity of lower esophageal sphincter, enhance esophageal acid clearance capacity, protect the gastric mucosa and promote gastric emptying. Goals of treatment are to relieve symptoms, heal esophagitis, improve quality of life and prevent recurrence and complications.

Changing lifestyle is the basis for treatment of GERD, which is only partially effective for some patients. Inhibiting gastric acid secretion and promoting gastrointestinal motility are currently key measures to treat GERD. PPI, an acid-inhibitory drug with rapid onset and strong action, acts on key \( H^+ - K^+ - ATP \) enzyme in terminal step of gastric acid secretion of parietal cells so that it is irreversibly inactivated, and thus has stronger acid inhibition with lasting effect, first choice drug for treatment of GERD. Esomeprazole, as a new generation of PPI, has strong inhibition of basal gastric acid and post-prandial gastric acid secretion, with high bioavailability, strong efficacy, lasting effect, less CYP2C19 enzyme metabolism and no accumulation effect in vivo\(^5\).

Itopride is a new prokinetic agent which enjoys double pharmacological action of dopamine D2 receptor blocking agent and acetylcholinesterase inhibitor. It can increase tension of lower esophageal sphincter, increase esophageal motility and acid clearance ability, and thus inhibit gastroesophageal reflux; also, it enhances stomach tension and sensitivity and promotes gastric emptying. Moreover, its adverse reactions are significantly reduced compared with other prokinetic agents, without occurrence of fatal arrhythmias\(^6\).

Our results show that total efficiency of clinical remission, endoscopic improvement of lesions, 24 h esophageal pH negative in treatment of gastroesophageal reflux disease with esomeprazole combined with itopride reaches 95% (38/40 cases), which is higher compared with the control group; Recurrence rate after treatment is only 7.5%, significantly lower than that of control group (15.63%) and with significant difference (\( p < 0.05 \)).

Our results show that in treatment of gastroesophageal reflux disease with esomeprazole combined with itopride, clinical remission rate is significantly improved, recurrence rate after treatment is significantly reduced, only 7.5%; moreover, adverse drug reactions are rare. Therefore, this paper suggests that esomeprazole combined with itopride is an effective drug for treatment of gastroesophageal reflux disease, and that the two have obvious synergetic effect, safe and reliable, and thus are worthy of clinical application and promotion.
References


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