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**SEARCH FOR AN OPTIMAL TREATMENT STRATEGY
FOR GASTROESOPHAGEAL REFLUX DISEASE
WITH CONCOMITANT OBESITY**

**ПОШУКИ ОПТИМАЛЬНОЇ СТРАТЕГІЇ ЛІКУВАННЯ
ГАСТРОЕЗОФАГЕАЛЬНОЇ РЕФЛЮКСНОЇ ХВОРОБИ
З КОМОРБІДНИМ ОЖИРІННЯМ**

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Gastroesophageal reflux disease (GERD) is a common pathology in the practice of general practitioners and gastroenterologists. Despite numerous studies by scientists around the world, the pathogenesis is not fully understood [1]. According to statistics, GERD causes 7 million outpatient visits and 550,000 emergency room visits per year in the United States [2].

The key links in the pathogenesis are spontaneous relaxations of the lower esophageal sphincter, diaphragmatic hernia, impaired esophageal motility, decreased pressure in the lower esophageal sphincter, delayed gastric emptying, overweight, and others [3]. Treatment includes lifestyle and dietary modifications, weight loss, and pharmacological agents. A real breakthrough in the treatment of GERD was the invention of proton pump inhibitors. Gradually, over the years of PPIs being introduced into practice, it

became apparent that this group of drugs has significant side effects and does not always achieve remission. Up to 40 percent of patients taking PPIs on a regular basis fail to achieve a significant reduction in symptoms, especially in refractory forms of GERD [4,5]. Also, GERD often develops on the background of obesity, the influence of which should also be taken into account when selecting therapy [6].

Objective. To investigate the effectiveness of combination therapy of GERD with the additional inclusion of the peptide drug tyrosine-2-alanine-glycine-phenylalanine-leucyl-arginine diacetate (dalargin) in the standard treatment protocol in patients with normal weight and obesity.

Materials and methods. The study was conducted at the Kharkiv City Student Hospital and included an examination of 110 patients with an average age of 20.71 ± 0.43 years, including 56 men and 54 women. Depending on the body mass index (BMI), 2 groups were formed: Group 1 – 40 patients with normal body weight (21.16 ± 0.48 kg/m²) and Group 2 – 70 patients with grade I obesity (31.70 ± 0.29 kg/m²). Also, each group was randomly divided in half into subgroup A and subgroup B. Subgroup A took PPIs and additionally dalargin, subgroup B took only PPIs. Patients underwent general clinical laboratory tests, fibrogastroduodenoscopy, abdominal ultrasound, and pH-metry. Clinical symptoms were assessed using the GERD-HRQL questionnaire before treatment and 3 weeks after.

Results. In the subgroups with additional dalargin administration, a more pronounced positive effect was observed, namely a decrease in heartburn, regurgitation and overall life impact score according to the questionnaire compared with the subgroups receiving standard therapy ($p < 0.05$). There was no statistically significant difference between the scores of women and men ($p > 0.05$).

In the group with normal BMI in subgroup A after treatment: heartburn – 3.95 ± 0.90 , regurgitation – 2.20 ± 0.69 , total impact score – 7.44 ± 1.55 . In subgroup B: heartburn – 4.45 ± 1.07 , regurgitation – 3.20 ± 0.61 , total impact score – 9.60 ± 1.93 .

In the group with obesity of the first degree in subgroup A after treatment: heartburn – 4.60 ± 0.63 , regurgitation – 3.31 ± 0.45 , total impact score – 9.26 ± 1.87 . In subgroup B: heartburn – 5.80 ± 0.65 , regurgitation – 4.14 ± 0.57 , total impact score – 11.37 ± 2.04 .

Conclusion. The additional administration of dalargin to the standard treatment of PPIs proved to be more effective than PPI monotherapy in terms of rapid symptom reduction, improvement of quality of life and return to work.

References:

1. Maret-Ouda, J., Markar, S. R., Lagergren, J. Gastroesophageal Reflux Disease. *JAMA*. 2020. 324(24). P. 2536. <https://doi.org/10.1001/jama.2020.21360>
2. Zaterka, S., Marion, S. B., Roveda, F., Perrotti, M. A., Chinzon, D. Historical perspective of gastroesophageal reflux disease clinical treatment. In *Arquivos de Gastroenterologia*. 2019. Vol. 56, Issue 2. <https://doi.org/10.1590/s0004-2803.201900000-41>
3. Young, A., Kumar, M. A., & Thota, P. N. GERD: A practical approach. *Cleveland Clinic Journal of Medicine*. 2020. 87 (4). P. 223–230. <https://doi.org/10.3949/ccjm.87a.19114>.
4. Zaterka, S., Marion, S. B., Roveda, F., Perrotti, M. A., Chinzon, D. Historical perspective of gastroesophageal reflux disease clinical treatment. In *Arquivos de Gastroenterologia*. 2019. Vol. 56, Issue 2. P. 202–208. <https://doi.org/10.1590/s0004-2803.201900000-41>
5. Naik, R. D., Meyers, M. H., Vaezi, M. F. Treatment of refractory gastroesophageal reflux disease. *Gastroenterology & Hepatology*. 2020. 16(4). P. 196.
6. Gorodner, V., Viscido, G., Signorini, F., Obeide, L., Moser, F. Gastroesophageal reflux disease and morbid obesity: evaluation and treatment. In *Updates in Surgery*. 2020. Vol. 70, Issue 3. P. 331–337. <https://doi.org/10.1007/s13304-018-0579-4>