Efficiency of Antianxiety Preparation Tenoten Used in Complex Therapy of Patients with *Helicobacter pylori*-Associated Ulcer Disease of the Duodenum

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Tenoten reduces anxiety in patients with ulcer disease of the duodenum, promotes pain control, and induces no side effects. Tenoten can be recommended for active use in complex therapy of patients with ulcer disease.

Key Words: *ulcer disease of the duodenum; anxiety; tenoten*

Ulcer disease (UD) is now considered as a multifactor disease, which is most adequately described by the theory of balance between aggressive and protective factors. Among aggressive factors, *Helicobacter pylori* infection and acid production in the stomach play the leading role [12,13].

Psychosomatic aspects are also attributed to actual components of UD. The interrelationship between UD and endocrine sphere is usually considered in the context of psychosomatic medicine. Modern psychosomatic medicine studies interrelations between human emotional life and the nature of its psychosomatic disorders and the role of individual psychic factors and environment in the etiology of the disease. It proceeds from the assumption that life conditions at present and in the past and emotional life of the individual can significantly affect the function of its internal organs. Psychosomatic medicine does not allocate the role of the only and decisive factor in the etiology of somatic diseases to psychogenic influences, but supports the concept of polyetiological nature of human diseases [5].

UD should be considered as a typical psychosomatic disease, where psychosomatic and psychosocial factors play an important role and precede or promote the formation of an ulcer defect in the stomach or duodenum [2,9]. At the same time, psychic determinants are only a co-factors that acquire a casual role only in combination with genetic, environmental (*Helicobacter pylori*), immune, and local factors responsible for disease development [6,8,11].

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MATERIALS AND METHODS

The study included 102 individuals with *Helicobacter pylori*-positive UD of the duodenum (patients of Gastroenterological Department, Hospital of Research Institute of Medical Problems of the North). The patients received standard therapy including omeprazole (20 mg 2 times a day) and maalox in a standard dose, and eradication of *Helicobacter pylori* according to a 7-day scheme using antibacterial preparations clarithromycin (0.5 g 2 times a day) and amoxicillin (1 g 2 times a day). The treatment course lasted for 3 weeks. Esophagogastroduodenoscopy (EGDS, Olympus-10) was performed in all patients before hospitalization and 10 and 20 days after the start of treatment. During EGDS, the duodenal ulcer was viewed and the shape, size, localization (bulb or descending part of the duodenum), and stage of the disease (open ulcer, red scar, white scar) were determined. The presence of *Helicobacter pylori* was verified by morphological and urease methods [4].

The dynamics of clinical symptoms was evaluated daily and recorded in special forms. Group 1 patients (n=49; 27 men, 22 women; mean age 42.30±2.81

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TABLE 1. Anxiety in Patients with UD (*M*±*m*)

Scale	Group	Start of treatment	After 10 days	After 20 days
Zung	Group I	48.29±4.06	40.54±3.39	37.43±3.12*
	Group II	47.61±3.90	44.37±3.60	41.19±3.24
Hamilton	Group I	23.43±1.80	14.93±1.26**	10.50±0.98**
	Group II	24.15±1.90	20.62±1.70^{+}	17.40±1.10*$^{++}$

Note. *p<0.01, **p<0.001 compared to values before treatment; ^{+}p<0.01, ^{++}p<0.001 compared to group 1.

years) in parallel to standard therapy received tenoten, an antianxiety preparation, in a dose of 2 tablets 3 times a day. Group 2 patients (n=53; 29 men, 24 women; mean age 41.80±2.36 years) received only standard therapy. The level of anxiety in all patients was evaluated before and on days 10 and 20 of therapy using Zung Anxiety Scale (subjective evaluation) and Hamilton Anxiety Scale (objective evaluation).

The data were processed statistically using Wilcoxon test.

RESULTS

The most pronounced changes in anxiety level were observed in group 1 patients (Hamilton scale). In group 2, the level of anxiety also decreased after 20-day therapy, which can be explained by positive clinical dynamics and ulcer healing. It should be noted that in group 1 the level of anxiety was significantly lower than in group 2 on days 10 and 20 of treatment (Table 1).

Zung score significantly decreased in group 1 after 20-day treatment, while in group 2 no reliable decrease in anxiety level were noted during the treatment (Table). These results demonstrate different dynamics of the anxiety level in the two groups.

Before the therapy, epigastric pain was recorded in 98% patients of group 1 and 98.1% patients of group 2. After 10 days of treatment, the pain syndrome was still observed in 10.2 and 37.7% patients of groups 1 and 2, respectively (p=0.001). After 20 days these parameters were 0 и 1.9%, respectively.

After 10-day treatment, ulcer defects were observed in 30.6 and 41.5% patients of groups 1 and 2, respectively; after 20 days the corresponding values were 0 и 1.9%

Psychopathic disturbances, emotional tension, hypochondria, pessimism, alienation or, in contrast, the need in attention from other people, primarily, family members are more typical of patients with UC compared to patients with other psychosomatic diseases [10]. Evaluation of averaged personality profile using Minnesota Multiphasic Personality Inventory showed that patients with UD are characterized by pronounced psychoautonomic syndrome characterized by hypochondria, anxiety, and depression traits and predominant elevation of trait-state anxiety [3]. Elevated anxiety in patients with UD was also reported by other authors [7]. Using Spielberger—Khanin questionnaire and Short Multifactorial Personality questionnaire E. I. Beloborodova with co-workers demonstrated high levels of anxiety, pessimism, impulsivity, and emotional lability in patients with UD.

The use of antianxiety preparations in the complex therapy of UD is advisable. An important aspect is more dynamics decrease in the level of anxiety and incidence of epigastric pain in patients treated with tenoten compared to controls, which increases compliance and improves quality of life. All these together with almost complete absence of side effects allowed us to recommend tenoten for wide use in the complex therapy of patients with UD.

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