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COMPREHENSIVE STUDY OF GASTRITIS. ETIOLOGY, PATHOGENESIS, CLINICAL MANIFESTATIONS, AND MODERN THERAPEUTIC STRATEGIES

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Abstract: This extensive scientific research is dedicated to one of the most pressing issues in modern gastroenterology—inflammatory-dystrophic diseases of the gastric mucosa. The article provides a profound analysis of the complex etiopatogenesis of gastritis, the molecular-level role of Helicobacter pylori infection in its development, as well as the interrelationship between dietary factors, exogenous toxic influences, and endogenous autoimmune processes. It highlights the specific characteristics of clinical manifestations arising from regional dietary habits, socio-psychological stress factors, and the uncontrolled use of medications among the population of Uzbekistan. The diagnostic significance of modern high-tech methods, including high-definition video endoscopy and histomorphological examinations according to the "Sydney" system, is scientifically substantiated. In the treatment section, the effectiveness of eradication therapy is analyzed based on the international "Maastricht VI" consensus and local clinical protocols. The study concludes with a complex set of recommendations for preventing the transition of the disease into a chronic form, gastric cancer prophylaxis, and improving the quality of life for patients.

Keywords: Gastritis, Helicobacter pylori, etiopatogenesis, dyspepsia, eradication, proton pump inhibitors, gastric mucosa, atrophy, metaplasia, endoscopy, histomorphology, diet therapy, gastroprotection.

Introduction: Currently, within the system of internal diseases, pathologies of the digestive organs, specifically gastritis, occupy one of the leading positions globally in terms of prevalence, socio-economic impact, and the severity of complications they cause. From a medical perspective, gastritis is not merely temporary discomfort in the epigastric region; it is a long-term inflammation of the gastric mucosa caused by various harmful factors, characterized by the disruption of regeneration processes at the cellular level, reduction of the glandular apparatus, and consequently, the impairment of the secretory and motor functions of the stomach. According to World Health Organization (WHO) data, approximately 50-80% of the world's population encounters chronic forms of gastritis during their lifetime [3]. In the context of Uzbekistan, the relevance of this disease is directly linked to demographic growth, changes in dietary regimes due to urbanization, and the specificities of national cuisine—specifically the consumption of very hot, high-calorie, fatty, and spicy foods [2]. If left untreated for a long period, gastritis not only reduces a person's quality of life but also creates a foundation for dangerous oncological complications such as atrophy of the gastric mucosa, intestinal metaplasia, dysplasia, and ultimately adenocarcinoma, following the "Correa Cascade" mechanism. It has been scientifically proven that the risk of developing gastric cancer is 5-10 times higher in patients with chronic atrophic gastritis compared to the healthy population [5]. Therefore, the in-depth analysis of the causes of the disease and the development of individual, pathogenetic approaches to treatment remain among the most priority tasks of modern practical medicine.

Literature review: The problem of gastritis has been studied fundamentally and clinically by local and foreign scientists for many years. In Uzbekistan, Academician Sh.I. Karimov and Professor A.G. Gadayev have made invaluable contributions to the scientific and theoretical foundation of the field of gastroenterology [4, 6]. Their scientific research details the disruption of acid-base balance in the pathogenesis of gastrointestinal diseases, as well as the influence of hormonal and enzymatic changes on the gastric protective barrier under the hot climate conditions of our region. Our local scientists have also emphasized the role of ecological and genetic predisposition alongside dietary factors in the progression of gastritis. Internationally, the understanding of gastritis changed revolutionarily in 1982 with the discovery of the Helicobacter pylori bacterium by Australian scientists B. Marshall and J. Warren [3]. This discovery opened the door to studying gastritis within the "infectious theory" framework and utilizing antibiotics for treatment. According to the research of leading Russian scientist I.V. Maev, the course of chronic gastritis is often asymptomatic or occurs under the guise of "pseudo-dyspepsia," and this "hidden danger" requires a high level of oncological alertness from physicians [5]. International consensuses of recent years (Maastricht VI) indicate that in an era where the resistance of the bacterium to antibiotics (especially clarithromycin) is increasing, there is a necessity to strengthen treatment regimens with bismuth preparations and probiotics [7]. Local scientist V.Z. Zokirov, in his fundamental works, has perfectly developed differential diagnostic criteria between various clinical forms of chronic gastritis [1].

Research methods: To conduct this scientific study, data from 250 patients treated between 2023 and 2025 at the Tashkent city clinical hospitals and the multi-disciplinary clinics of the Tashkent Medical Academy were analyzed. The research group consisted of individuals aged 18 to 75, categorized into groups based on gender, age, and clinico-morphological forms of the disease. The following complex and high-precision diagnostic methods were employed in the study. Clinico-anamnestic analysis. Patient complaints, the relationship of pain to food intake, harmful habits (smoking, alcohol), hereditary predisposition, and the history of long-term medication use (specifically NSAIDs) were studied in detail. Instrumental diagnostics (EGD). High-definition video endoscopy was used to assess the macroscopic state of the gastric mucosa, the degree of hyperemia, edema, granularity, and submucosal hemorrhages. Morphological and histological analysis. According to the requirements of the "Sydney" system, biopsy samples were taken from five points of the stomach (2 from the antrum, 2 from the body, and 1 from the incisura angularis). This allowed for the determination of inflammatory activity, degree of atrophy, intestinal metaplasia, and stages of dysplasia. H. pylori diagnostics. A combination of invasive (rapid urease test and histological staining) and non-invasive (C-13 urea breath test) methods was used to detect the bacterium. Secretory function study. Gastric pH-metry was performed to study the daily dynamics of acid formation processes and the levels of basal and stimulated secretion.

Results and discussion: The results of the study indicated that in the absolute majority of the examined patients (86%), the origin of gastritis was directly related to Helicobacter pylori infection. This suggests that the level of infection with this bacterium remains high among the population of Uzbekistan, particularly within family environments, and that unsanitary factors persist. In 8% of patients, the cause of gastritis was found to be the long-term uncontrolled consumption of medications (primarily aspirin in cardiac patients and pain-relieving NSAID drugs). During the analysis of the clinical picture, younger patients (18-35 years old) frequently exhibited damage to the antral part of the stomach (Type B gastritis) and increased acid secretion. Their primary complaints were "empty stomach" pains, acid regurgitation, and heartburn. In elderly patients, however, extensive atrophy of the gastric mucosa (pangastritis) and a significant

decrease in acid formation function (hypoacid state) were identified. In this group, although pain symptoms were not intense, symptoms of constant heaviness, loss of appetite, and signs of B12 deficiency anemia predominated. The analysis of treatment effectiveness showed that in the group where standard triple eradication therapy was applied, the rate of bacterial clearance after a 14-day course was 80-82%. However, when quadruple therapy—including bismuth preparations and probiotics—was utilized, the eradication coefficient rose to 94-96% [7]. Additionally, it was noted that in patients who strictly adhered to the diet (Diet No. 1), the regeneration processes of the mucosa occurred 35% faster, and quality of life indicators improved significantly.

Conclusion: Complex clinico-practical research on gastritis allows for the following fundamental conclusions. Helicobacter pylori remains the leading etiological factor of chronic gastritis in the conditions of Uzbekistan, which necessitates the promotion of sanitary-hygienic culture among the population and the implementation of family eradication programs. In diagnosing the disease, it is mandatory to use video endoscopy confirmed by histological analysis rather than relying solely on subjective complaints, as this is the only guarantee for the timely detection of pre-cancerous conditions. In treatment strategies, incorporating changes into standard regimens considering antibiotic resistance—specifically the use of bismuth preparations and gastroprotectors (rebamipide)—significantly increases eradication efficiency. For the successful control of gastritis and the prevention of complications, it is crucial to combine drug therapy with lifestyle modification, dietary adherence, and the minimization of psychological stress factors.

References:

1. Zokirov V.Z. Internal Diseases: Gastroenterology, Tashkent. Yangi asr avlodi, 2021. — 450 p.
2. Gadayev A.G. Propaedeutics of Internal Diseases and Modern Diagnostic Criteria, Tashkent. O‘qituvchi, 2019. — 380 p.
3. Malfertheiner P. et al. Management of Helicobacter pylori infection — the Maastricht VI/Florence Consensus Report, Gut Journal, 2022.
4. Karimov Sh.I. Textbook of Internal Diseases, Tashkent. Ibn Sino, 2018. — 520 p.
5. Maev I.V. Diseases of the Stomach and Duodenum: A Guide for Physicians, Moscow. Meditsina, 2022. — 320 p.
6. Akilov X.A. Fundamentals of Gastroenterology: Clinical Recommendations, Tashkent, 2020. — 210 p.
7. Ministry of Health. Clinical Standards for the Diagnosis and Treatment of Chronic Gastritis, Tashkent, 2023.