



GASTRITIS: ETIOLOGY, PATHOGENESIS, CLINICAL FEATURES AND MODERN APPROACHES TO TREATMENT

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Introduction: Gastritis is an inflammatory condition of the gastric mucosa that manifests in acute or chronic forms. Chronic gastritis affects approximately 50–60% of the global population and is most commonly associated with *Helicobacter pylori* infection, unhealthy dietary habits, stress, harmful lifestyle behaviors, and prolonged use of non-steroidal anti-inflammatory drugs (NSAIDs).

Changes in lifestyle among young people, increased fast-food consumption, and rising stress levels contribute to the growing incidence of gastritis.

Keywords: lifestyle, harmful habits, stress, ibuprofen, gastric mucosa.

Discussion and Results

Main causes of gastritis:

1. **Helicobacter pylori infection** — the most common cause of chronic gastritis (60–70%).
2. **NSAID medications (ibuprofen, aspirin, etc.)** — reduce prostaglandin synthesis, which protects the gastric mucosa[1].
3. **Alcohol consumption and smoking** — directly damage the gastric mucosa.
4. **Stress (post-traumatic, physical, psycho-emotional)** — increases gastric acid secretion.
5. **Reflux gastritis** — backflow of bile into the stomach[2].
6. **Autoimmune gastritis** — formation of antibodies against parietal cells and intrinsic factor.
7. **Food allergies, toxic substances, chemical irritants.**

Pathogenesis

The development of gastritis involves disruption of the balance between protective and damaging factors of the gastric mucosa[3].

Key pathogenetic mechanisms:

- Increased gastric acid secretion or reduced protective factors (mucus, bicarbonate secretion).
- *H. pylori* urease, cytotoxins (CagA, VacA), and proteases damage the mucosa.
- Enhanced release of inflammatory mediators (IL-1, TNF- α).
- Slowing of mucosal regeneration processes.
- In autoimmune gastritis: destruction of parietal cells → achlorhydria → vitamin B12 deficiency → megaloblastic anemia[4].

Clinical manifestations

The main symptoms of gastritis include:



- Epigastric pain
 - Heartburn and abdominal bloating
 - Nausea and vomiting
 - Loss of appetite
 - Pain exacerbation after consuming spicy food
 - In severe cases: hematemesis and melena (black tarry stool)
- Chronic gastritis often remains asymptomatic for long periods[5,6].

Classification

1. Acute gastritis

- Erosive
- Catarrhal
- Fibrinous
- Hemorrhagic

2. Chronic gastritis

- H. pylori-associated (Type B)
- Autoimmune gastritis (Type A)
- Chemical gastritis (Type C) – reflux gastritis, NSAID-induced
- Mixed forms

Diagnostics

The following methods are used to diagnose gastritis:

- Fibrogastrroduodenoscopy (FGDS) — gold standard
- Biopsy — morphological confirmation
- H. pylori tests:
 - Rapid urease test
 - Stool antigen test
 - Serology
 - Urea breath test
- Assessment of gastric acidity (pH-metry)
- Blood tests: vitamin B12, signs of anemia
- Ultrasound — for differential diagnosis[7,8]

Modern approaches to treatment

1. Etiological treatment

- If H. pylori is detected: eradication therapy (PPI + amoxicillin + clarithromycin or a four-component regimen).
- If NSAID-induced: discontinue or replace the medication.

2. Pathogenetic treatment

- Proton pump inhibitors (PPIs): omeprazole, pantoprazole, esomeprazole.
- Antacids: magaldrate, phosphalugel.
- Gastroprotective agents: sucralfate, rebamipide.
- Prokinetics: domperidone, itopride (in cases of gastric atony).
- Vitamin B12 therapy — for autoimmune gastritis.

3. Diet and lifestyle modification



- Avoid fried, spicy, and excessively hot foods
- Reduce intake of acid-stimulating foods (coffee, carbonated beverages, vinegar-containing meals)
- Quit alcohol and smoking
- Eat small, frequent meals 5–6 times per day[9,10]

Complications

If left untreated, gastritis may lead to:

- Gastric erosions and ulcers
- Gastrointestinal bleeding
- Pernicious anemia (in autoimmune gastritis)
- Gastric polyps
- Increased risk of gastric cancer (associated with *H. pylori*)[11]

Conclusion.

Gastritis is a multifactorial disease with diverse clinical manifestations and potentially serious complications. Its development is strongly influenced by *H. pylori* infection, harmful lifestyle habits, poor diet, and medication use. Early diagnosis, appropriate treatment, and preventive measures are essential to avoid severe outcomes. Modern eradication regimens, PPIs, and gastroprotective agents represent the foundation of effective management strategies for gastritis.

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