



МІНІСТЕРСТВО ОСВІТИ І НАУКИ УКРАЇНИ
СУМСЬКИЙ ДЕРЖАВНИЙ УНІВЕРСИТЕТ
КАФЕДРА ІНОЗЕМНИХ МОВ ТА ЛІНГВОДИДАКТИКИ
ЛІНГВІСТИЧНИЙ НАВЧАЛЬНО-МЕТОДИЧНИЙ ЦЕНТР

МАТЕРІАЛИ

XVIII ВСЕУКРАЇНСЬКОЇ НАУКОВО-ПРАКТИЧНОЇ КОНФЕРЕНЦІЇ СТУДЕНТІВ, АСПІРАНТІВ ТА ВИКЛАДАЧІВ ЛІНГВІСТИЧНОГО НАВЧАЛЬНО-МЕТОДИЧНОГО ЦЕНТРУ КАФЕДРИ ІНОЗЕМНИХ МОВ ТА ЛІНГВОДИДАКТИКИ

«TO MAKE THE WORLD SMARTER AND SAFER»

25-26 квітня 2024 року



Сумський державний університет
(вул. Харківська, 116, м. Суми, Сумська обл., 40007)

**Суми
2024**



MINISTRY OF EDUCATION AND SCIENCE OF UKRAINE
SUMY STATE UNIVERSITY
DEPARTMENT OF FOREIGN LANGUAGES AND
LINGUODIDACTICS
FOREIGN LANGUAGE TEACHING CENTRE

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**OF THE EIGHTEENTH
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"TO MAKE THE WORLD SMARTER AND SAFER"

April 25-26

**Sumy
2024**

To Make the World Smarter and Safer: Матеріали XVIII всеукраїнської науково-практичної конференції студентів, аспірантів та викладачів Лінгвістичного навчально-методичного центру кафедри іноземних мов та лінгводидактики СумДУ (25-26 квітня 2024 р.) / за заг. ред. професора Таценко Н.В. – Суми : СумДУ, 2024. – 168 с.

У матеріалах подані тези XVIII Всеукраїнської науково-практичної конференції студентів, аспірантів та викладачів Лінгвістичного навчально-методичного центру кафедри іноземних мов та лінгводидактики СумДУ. До збірника ввійшли наукові дослідження, присвячені актуальним проблемам сучасних інноваційних технологій та процесів у науці, техніці та різних сферах людської діяльності.

Для молодих науковців, викладачів і студентів усіх факультетів.

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***За зміст статей і правильність цитування
відповідальність несе автор***

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SYMPTOMS, TREATMENT AND PREVENTION OF GASTRITIS

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Gastritis is an inflammation of the protective lining of the stomach.

Acute gastritis involves sudden, severe inflammation. Chronic gastritis involves long-term inflammation that can last for years if it's left untreated.

Erosive gastritis is a less common form of the condition. It typically doesn't cause much inflammation, but it can lead to bleeding and ulcers in the lining of the stomach.

Symptoms

Gastritis doesn't cause noticeable symptoms in everyone. The most common source symptoms are: nausea, vomiting, a feeling of fullness in the upper abdomen, particularly after eating, indigestion.

If a patient has erosive gastritis, he might experience different symptoms, including black stools, vomiting blood or material that looks like coffee grounds.

Treatment

The treatment for gastritis depends on the cause of the condition.

If a patient has gastritis caused by nonsteroidal anti-inflammatory drugs (NSAIDs) or other medications, avoiding those drugs may be enough to relieve the symptoms. It is important to source the symptoms. If a patient thinks his prescription medication is causing gastritis, he has to talk to a prescriber before stopping or modifying the dosage.

Doctors routinely treat gastritis as a result of *H. pylori* with antibiotics in order to kill the bacteria.

In addition to antibiotics, several other types of medication are used to treat gastritis.

Medications called proton pump inhibitors work by blocking cells that create stomach acid. Common proton pump inhibitors include: omeprazole (Prilosec), lansoprazole (Prevacid), esomeprazole (Nexium).

However, long-term use of these medications, especially at high doses, can lead to an increased risk of spine, hip, and wrist fractures. It can also lead to increased risk of renal failure trusted source, dementia trusted source, and nutrient deficiencies.

Speak to a doctor before beginning one of these medications to create a treatment plan that is suitable for a certain patient.

Acid reducing medications and famotidine (Pepcid) as one example of such medication reduces the amount of acid a stomach produces.

By lowering the amount of acid that's released into the digestive tract, these medications relieve the pain of gastritis and allow a stomach lining to heal.

Antacids may be recommended to use for rapid relief of gastritis pain. These medications can neutralize the acid in the stomach. Some antacids may cause diarrhea or constipation, so a patient should talk to a doctor if he experiences any of these side effects.

Probiotics have been shown to help replenish digestive flora and heal gastric ulcers. However, there's no evidence that they have any impact on acid secretion.

There are currently no guidelines supporting the use of probiotics in ulcer management.

Causes

Weakness in your stomach lining allows digestive juices to damage and inflame it, causing gastritis. Having a thin or damaged stomach lining raises a risk for gastritis.

A gastrointestinal bacterial infection can also cause gastritis. The most common bacterial infection that causes it is *H. pylori*, a bacterium that infects the lining of the stomach. The infection is usually passed from person to person, but it can also be transmitted through contaminated food or water.

Certain conditions and activities may increase the risk for developing gastritis. Other risk factors include:

extreme alcohol consumption, routine use of NSAIDs like ibuprofen and aspirin, stress, cocaine use, age, because the stomach lining thins naturally with age, tobacco use.

Diagnosis

Doctors will perform a physical exam, ask about the symptoms, and a family history. They may also recommend a breath, blood, or stool test to check for *H. pylori*. In addition, a doctor may perform an upper GI endoscopy. This is important to check for inflammation in the esophagus, stomach, and duodenum. Also, a doctor may take a small sample, or biopsy, of the lining of the stomach. A pathologist will examine this sample for anything unusual under a microscope.

Performance an upper GI series is very informative. This involves taking X-rays of a digestive tract after a patient swallows a barium solution. This will help distinguish the areas of concern.

A blood test is necessary to check for other causes for the gastritis symptoms or signs of complications.

A stool sample may rule out an *H. pylori* infection or blood in a patient's stool. Blood may indicate bleeding in the stomach.

An urea breath test also helps the investigation of the *H. pylori* infection by making a patient swallow a urea capsule and then seeing whether he breathes out carbon dioxide atoms. This would indicate the infection.

Complications

If a gastritis is left untreated, it can lead to a variety of complications. Certain forms of gastritis can increase the risk of developing stomach cancer, particularly in people with thinned stomach linings.

Complications may include anemia, deficiencies in vitamin B12, vitamin D, folic acid, vitamin C, zinc, calcium and magnesium, bleeding in the stomach, perforation inside the stomach, peptic ulcers, chronic atrophic gastritis, which causes the loss of cells in the gastric glands in addition to inflammation, gastric metaplasia and dysplasia, which are types of precancerous lesions in the stomach, achlorhydria, which prevents the stomach from producing the acid it needs to digest food properly, perforation of the stomach, cancers such as adenocarcinoma (gastric cancer), mucosa-associated lymphoid tissue (MALT) lymphoma, and neuroendocrine tumors (NET).

Because of these potential complications, it's important to consult with a doctor if a patient experiences any symptoms of gastritis, especially if they're chronic.

Prevention

Preventative strategies may depend on the health and any conditions increasing the risk for developing gastritis. But, since gastritis doesn't always have a clear cause, it can be hard to prevent.

However, there are some things people can do:

Maintaining good hygiene habits. Habits like handwashing may help reduce the risk of having a *H. pylori* infection.

Taking good care of mental health. Self-care and de-stressing practices may reduce the risk of developing stress-induced gastritis.

Eating smaller meals more slowly and regularly. Also, avoiding or limiting fried, salty, sugary and spicy foods (these are things that research shows could trigger gastritis symptoms).

Quitting smoking. Avoiding or limiting alcohol and caffeine.

The outlook for gastritis depends on the underlying cause. Acute gastritis usually resolves quickly with treatment. *H. pylori* infections, for example, can often be treated with one or two rounds of antibiotics.

However, sometimes treatment fails and it can turn into chronic, or long-term forms of gastritis.

THE SIGNIFICANCE OF DNA UNLOCKS THE BLUEPRINT OF LIFE

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The discovery and understanding of DNA (deoxyribonucleic acid) has revolutionized the field of biology, providing invaluable insights into the intricate mechanisms of life, genetic diversity, and the potential for medical advancements, thus establishing it as a cornerstone in scientific research and technological innovation.

The discovery of DNA as the hereditary material has been a groundbreaking moment in the history of science. This thesis explores the multifaceted significance of DNA, delving into its role as the blueprint of life and its impact on diverse aspects of biology, medicine, and technology.

1. Genetic Blueprint and Inheritance:

DNA serves as the genetic blueprint that carries the instructions for the development, functioning, and reproduction of all living organisms. The process of inheritance, governed by DNA, determines the traits and characteristics passed from one generation to the next. DNA is called the blueprint of life because it contains the instructions needed for an organism to grow, develop, survive and reproduce. DNA does this by controlling protein synthesis. Proteins do most of the work in cells, and are the basic unit of structure and function in the cells of organisms.