• name: "S. V. Sushkov"

orcid: "0000-0000-0000-0000"

year: 2024

journal: "Journal of Surgery"

doi: "10.1000/xxxx"

pdf: "/static/pdfs/cholecystitis.pdf"

lang: "en"

tags: ["cholecystitis", "surgery", "AI"]

featured: true

bibtex: "/static/bib/cholecystitis.bib"

## **Brief Description**

Cholecystitis is one of the most common diseases of the gallbladder, requiring a comprehensive clinical approach. This work examines modern methods of diagnosis and treatment of acute and chronic cholecystitis.

#### Introduction

Cholecystitis is characterized by inflammation of the gallbladder wall and can occur in acute or chronic forms. The disease is often associated with the presence of gallstones (calculous cholecystitis), but can also develop without them (acalculous cholecystitis).

### **Clinical Manifestations**

Main symptoms include:

- Pain in the right upper quadrant
- Nausea and vomiting
- Elevated body temperature
- Positive Murphy's sign

## **Diagnosis**

Modern diagnosis of cholecystitis includes:

- 1. Ultrasound examination (US)
- 2. Computed tomography (CT)
- 3. Laboratory tests (complete blood count, biochemistry)
- 4. Hepatobiliary scintigraphy

#### **Treatment**

Main treatment methods:

- Conservative therapy (antibiotics, antispasmodics)
- Cholecystectomy (laparoscopic or open)
- Percutaneous cholecystostomy (in severe conditions)

# **Application of Artificial Intelligence**

New machine learning technologies allow for improved diagnosis and prediction of cholecystitis complications based on analysis of medical images and clinical data.

## **Conclusion**

Timely diagnosis and adequate treatment of cholecystitis help prevent the development of serious complications and improve patients' quality of life.