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## Crohn's disease - diagnosis and treatment

Patrycja Ręba

Faculty of Medicine and Health Sciences,

Jan Kochanowski University in Kielce

**Abstract** 

Admission

Crohn's disease belongs to the group of chronic and still incurable diseases. It has periods of exacerbation and partial or complete remission. It mainly affects young people. The peak incidence is between the ages of 15 and 35, but it is possible to develop the first symptoms of the disease at any age. Due to its chronicity, incurability and the possibility of various complications, this disease is a heavy psycho-physical as well as social burden.

Aim

The aim of the study is to analyze the diagnosis and treatment of Crohn's disease.

Material and method

Review of the available literature on the subject.

Results

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Crohn's disease is a disease that may affect any part of the gastrointestinal tract (most often the end segment of the small intestine), causing a significant reduction in the quality of life and impairment of the patient's efficiency. The most common symptoms are abdominal pain, diarrhea, blood in the stools, testable (often tender) abdominal resistance, weight loss, weakness, low-grade fever, and fever. They are often accompanied by changes in the anal area - fistulas, fissures and abscesses, as well as enteroskin fistulas. Diagnosis is based on endoscopy with biopsy, histopathology and radiological methods using contrast. Despite better recognition and easier access to diagnostics, some cases are diagnosed during the procedure due to obstruction or misdiagnosed appendicitis. The most commonly used treatments are 5-aminosalicylates, glucocorticosteroids and thiopurines. Currently, two anti-TNF-α antibodies used in biological therapy are registered in Poland.

Conclusions

Treatment with classical methods and biological drugs does not always avoid surgical intervention. Long-term observation shows that most patients undergo at least one surgery. New reports more and more boldly indicate the desirability of early introduction of biological and immunosuppressive therapy (top-down strategy). Although the chance of disease change as a result of aggressive treatment from the moment of diagnosis is tempting, due to the possible complications of such therapy, especially infectious, caution should be exercised until we have more data. These complications also require that this treatment be dealt with by reference centers with extensive experience in this field.

**Key words: Crohn's disease.** 

Crohn's disease (Crohn's Disease, CD) is classified as a chronic inflammatory bowel diseases. It is most often diagnosed in young, female people between 15 and 30 years of age, although the symptoms of the disease may also appear later, in the range of 60-80 years. Crohn's disease also occurs in children. In Poland, up to 30-40,000 people suffer from Crohn's disease. It mainly affects young people under 35 years of age. According to the 2018 "Study of patients with inflammatory bowel disease (IBD)", 25% of respondents with Crohn's disease are under 25 years of age, and 61% are between 26 and 40 years old. 65% of the sick are women. The younger the age of onset, the more aggressive the course of the disease, which limits everyday functioning. How to live when you have to deal with abdominal pain,

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accompanying diarrhea (usually without blood), occurring in 70-90% of patients, or fever? [1,2,3,4]

The consequence of disease activity is iron deficiency anemia, malnutrition, and sometimes exhaustion of the body, and the need for multiple surgeries, in many cases resulting in the creation of a stoma. Patients do not find understanding in society, they are stigmatized and excluded from everyday, normal functioning. And yet they want to study, work, enter into relationships, start a family and participate in social life. Only 46% of people with Crohn's disease work full-time [5,6,7,8].

A characteristic feature of Crohn's disease is that the inflammation affects only selected sections <u>digestive system</u>while others leave without signs of disease. Inflammation, caused by Crohn's disease, most often, in 40-50% of patients, is located in the ileum (this is the final segment of the small intestine). In 30-40 percent of patients, the inflammation occurs simultaneously<u>small intestine</u>and the large intestine, and in 20 percent only the colon. In addition, it is rare, admittedly, that inflammation travels up the digestive system and spreads<u>stomach</u>, <u>esophagus</u> and even the oral cavity [1,3,9,10].

The causes of Crohn's disease are not fully understood, although specialists indicate several factors that may affect its occurrence. It is also possible that a combination of several of them is necessary to develop the disease. The causes of Crohn's disease include:

- genetic conditions the disease is more often found in people whose close relatives suffer from enteritis,
- a sudden decrease in immunity, caused e.g. by a viral or bacterial infection
- smoking,
- the use of contraceptive hormonal pills,
- the use of non-steroidal anti-inflammatory drugs [4,11].

In Crohn's disease, symptoms depend on where the inflammation is taking place and how severe it is. If you have worsening symptoms, especially if you have diarrhea, you notice blood or mucus in your stools, or if your stools are black, you need medical attention. Also, if the abdomen is distended, the patient experiences severe pain, and the symptoms are accompanied by a fever above 38 degrees C [2, 12, 13].

Most often, patients complain of:

- <u>stomach pain</u> (usually on the right side, at hip level, which is often mistakenly considered <u>appendicitis</u>),
- flatulence,
- weight loss,
- weakness and feverish conditions,
- perianal abscesses,
- anal fissures [4.14].

Moreover, in the course of the disease, fistulae form between the intestine and the skin, bladder or vagina in women. Inflammation can also occur in other parts of the body - such as:

- skin complications (erythema nodosum),
- arthritis,
- iritis,
- pericarditis,
- myocarditis,
- vasculitis, thromboembolic changes [8, 15, 16].

According to the 2018 Study of Patients with Inflammatory Bowel Disease (IBD), many patients also have comorbidities as a result of immune system disorders or medications, especially glucocorticoids and immunosuppressants. A survey conducted in 2018 among patients with inflammatory bowel diseases showed that they are often accompanied by, among others:

- peptic ulcer disease/reflux in 18% of patients,
- Hypothyroidism or overactive thyroid gland in 13%,
- chronic kidney disease in 8%,
- asthma or COPD in 8%,
- hypertension in 7% [9,10,17,18].

The diagnosis is made on the basis of an interview with the patient, after a series of tests, including:

- Blood tests OB and CRP,
- endoscopic examinations gastroscopy likes colonoscopy, during which a bowel biopsy is performed and the taken sample is assessed,

- abdominal tomography,
- Abdominal ultrasoundi,
- magnetic resonance imaging [7,8,19,20].

Crohn's disease is an incurable disease, the aim of the therapeutic process is to prevent further relapses and progression of the disease, which may affect subsequent sections of the gastrointestinal tract, lead to a full-walled inflammatory infiltrate and the development of intestinal and parenteral complications [16, 21].

As a result of numerous complications arising from improper treatment, patients have to face the necessity of, among others, parenteral or enteral nutrition (through a tube inserted into the stomach through the nose) and a significant disability in everyday functioning, they are also exposed to a greater risk of disease, for example: for colorectal cancer and many other diseases [14, 19, 20, 21].

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