

Differential diagnosis of diarrheal diseases

Differential diagnosis of diarrhea is based on anamnestic data and basic objective examination. If the patient does not report a recent stay in tropical or subtropical areas, we can consider one of the **4 groups of diseases** (enterotoxigenic; acute infectious diarrhea; conditions mimicking acute infectious diarrhea; subacute, chronic, or recurrent diarrhea).

Enterotoxigenic

They are formed after the ingestion of foods containing **bacterial toxins**. The stool is watery, yellow, without mucus and blood. The predominant symptom is vomiting. They have a short incubation period, the initial course is very turbulent, but the disease quickly subsides. **The treatment** consists of intensive rapid rehydration.

The most common agents include *Staphylococcus aureus*, *Bacillus cereus* and *Clostridium perfringens*.

Acute infectious diarrhea in the strict sense

Their cause is the overgrowth of pathogenic microorganisms in the intestines. The main symptoms include fever and abdominal pain. A mixture of blood and mucus appears in the stool. If the disease is of **bacterial origin**, vomiting occurs rarely or not at all, but stool is more often mixed with mucus and blood. On the contrary, diarrhea of **viral origin** is accompanied by vomiting, the stool is watery. The disease usually lasts for several days.

The treatment is rehydration again. Based on the culture examination of the stool the etiological agent is determined, which further determines the need for isolation or the use of antibiotics.

- Bacterial etiology: *Salmonella enterica*, *Campylobacter jejuni*, *Shigella species*, *Yersinia enterocolitica*, *Enterotoxigenic E. coli*, *Clostridium difficile*.
- Viral etiology: rotaviruses, noroviruses, enteradenoviruses.

Conditions mimicking acute infectious diarrhea

Inflammatory bowel diseases of unknown etiology

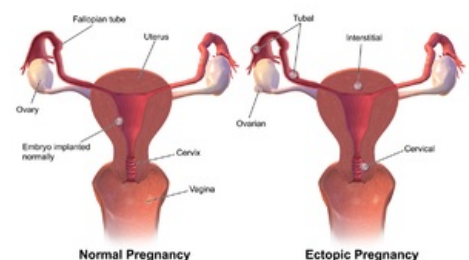
See *Crohn's disease* for more information.

See *Ulcerative Colitis* for more information.

The main representatives are ulcerative colitis and Crohn's disease. These diseases are accompanied by fever, diarrhea with mucus, and blood. In the laboratory, we find an increase in inflammatory parameters. The data of repeated attacks in the past is important.

Severe disease with a cause outside the digestive tract

- Sudden abdominal event – the main symptom is abdominal pain, subileus to ileocolic condition.
- Ectopic pregnancy is a severe condition accompanied by pallor, weakness, and hypotension. There is a history of menstrual failure.
- Severe sepsis – an example is a diarrhea at the onset of meningococcal sepsis.
- Toxic shock syndrome is accompanied by diarrhea, fever, rash, and hypotension.
- Legionellosis is a disease with major symptoms such as diarrhea, pneumonia, or encephalopathy.



Ectopic pregnancy scheme. Normal pregnancy (left), ectopic pregnancy (right)

Subacute, chronic, or recurrent diarrhea

The longer the disease lasts, the higher the probability of non-infectious etiology. Of **inflammatory diseases** (i.e. with an increase in inflammatory markers) can be Crohn's disease or ulcerative colitis. The reasons are also other serious, **noninflammatory disorders**, e.g. irritable bowel syndrome, rectal cancer, colonic polyps, conditions after bowel resection syndrome blind loop, chronic pancreatitis, intolerance to certain food components (lactose), malabsorption syndromes or endocrine disorders (hyperthyroidism, diabetes mellitus).

Infectious diseases are also the **cause**, especially opportunistic infections - clostridial colitis, parasitic infections, HIV/AIDS.

References

Related Articles

- Antidiaroics

References

- BENEŠ, Jiří. *Infekční lékařství*. 1. edition. Galén, 2009. ISBN 978-80-7262-644-1.

Intestinal infections	
In general	Differential diagnosis of diarrheal diseases • Enterotoxycosis • Diarrheal diseases in childhood • Drug-induced diarrhea • Therapy of diarrheal diseases
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Viral	Adenovirus enteritis • Coronavirus enteritis • Norovirus enteritis • Rotavirus enteritis
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