

Campylobacter enteritis 1.If

Campylobacter enteritis, or **campylobacteriosis**, is a worldwide widespread zoonosis manifesting as an acute diarrheal disease. The cause is the bacterium *Campylobacter jejuni*.

Epidemiology and pathogenesis

This is **the most common** bacterial diarrheal disease in the Czech Republic.

The pathogenic microbe is transmitted to humans directly from animals or indirectly from animal products and water. The most common route of spread of infection is **alimentary**, i.e. by ingesting contaminated unpasteurized milk and milk products, water and insufficiently heat-processed meat - mainly poultry and beef (steaks, steak tartare). *Campylobacter* penetrates the mucosa of the jejunum, ileum and duodenum and causes enterocolitis. If the microbe enters the bloodstream, a generalized disease occurs. Virulence factors are invasion (protein and lipopolysaccharide antigens are embedded in the membranes of campylobacters) and enterotoxins activating adenylate cyclase.

Clinical sign

After the incubation period (2-11 days), typical clinical symptoms appear - rise in temperature and headache, after another 12-24 hours, colicky abdominal pain occurs, often in the right lower quadrant (right iliac fossa syndrome) - they can appear as appendicitis, bloody diarrhea with an admixture of leukocytes and mucus and nausea. Most patients do not vomit. These symptoms usually last from two to six days. The main complication is dehydration. After several days to a week, reactive arthritis, Reiter's syndrome or erythema nodosum can develop on an immunopathological basis.

Therapy

With a mild course, no treatment is needed, the main importance is hydration, or replacement of mineral losses. Spasmolytics can be given for colicky abdominal pain. Antibiotics (macrolides: erythromycin, azithromycin) are suitable for immunodeficient persons or for more severe diarrhea and long-lasting symptoms of the disease, and for systemic disease aminoglycosides or ciprofloxacin, meropenem, imipenem... Especially in children, it can have a very severe course.

For stabilization, a diet without fats and simple sugars helps - carrots, rice...

Links

Resources

- Rozsypal, Hanuš. . *Základy infekčního lékařství*. - vydání. Charles University in Prague, Karolinum Press, 2015. 572 s. s. 189. ISBN 8024629321
- KLIEGMAN, Robert M., Karen J. MARCDANTE a Hal B. JENSON. *Nelson Essentials of Pediatrics*. 1. vydání. China : Elsevier Saunders, 2006. 5; s. 513-518. ISBN 978-0-8089-2325-1
- BENEŠ, Jiří. *Infekční lékařství*. 1.vydání vydání. Galén, 2009. 651 s. ISBN 978-80-7262-644-1
- <http://www.szu.cz/tema/prevence/infekcni-nemoci>
- Centers for disease control and prevention. *Campylobacter* [online]. [cit. 2013-11-18]. Dostupné z: <https://www.cdc.gov/nczved/divisions/dfbmd/diseases/campylobacter/>