

# Leptospirosis

**Leptospirosis** is an infectious disease caused by the bacterium *Leptospira interrogans* . It is an anthroponosis.

## Etiology

*Leptospira* belong to the *Spirochete* family . They are long, motile, strictly aerobic, and **spiral bacteria**. They do not stain well, but we can observe them using dark microscopy. Hemolysin, wall lipopolysaccharide or phospholipases are involved in its pathogenicity. They are widespread in the wild and also colonize many animals, some of which excrete them in the urine.

## Epidemiology

Infection most often occurs by ingesting infected water or food, but a person can also become infected by contact with an animal or, for example, by a penetrating injury to the skin. The infectious dose is small, sometimes just a few individual bacteria are enough. The incubation period is about 6-20 days.

In the Czech Republic, leptospirosis occurs mainly after floods.

## Clinical picture

The course of the disease varies according to the nature of the infectious strain. We distinguish between icteric and anicteric forms.

### Icteric form

- Presents as Weil's syndrome - jaundice, kidney damage, meningeal syndrome and bleeding;
- jaundice, myalgia, headache;
- a marked disparity between high bilirubin and relatively low ALT ;
- the patient is more at risk of **kidney failure** and bleeding.

### Anicteric form

- **more common** , similar to the flu or seasonal meningitis , has a milder course;
- we find signs of liver and kidney damage;
- it heals without consequences.

## Diagnosis

- Based on epidemiological history, significant clinical manifestations;
- specific Ig in serum;
- dark microscopy.

## Therapy

- Anicteric forms are treated only symptomatically;
- more severe treated with penicillin or ampicillin ;

## Links

### Related Articles

- Spirochetes

### Source

- BENEŠ, Jiří. *Study materials* [online]. [feeling. 2010]. < <http://jirben.wz.cz> >.
- JULÁK, Jaroslav. *Introduction to medical bacteriology*. 1st edition. Prague: Karolinum, 2006. 404 pp. ISBN 8024612704 .
- BEDNÁŘ, Marek, Andrej SOUČEK and Věra FRAŇKOVÁ, et al. *Medical microbiology: Bacteriology, virology, parasitology*. 1st edition. Prague: Marvil, 1996. 558 pp. ISBN 8594031505280 .
- VOTAVA, Miroslav, et al. *Medical microbiology special*. 1st edition. Brno: Neptun, 2003. 495 pp. ISBN 80-902896-6-5 .

