

Q fever

Template:Infobox - onemocnění

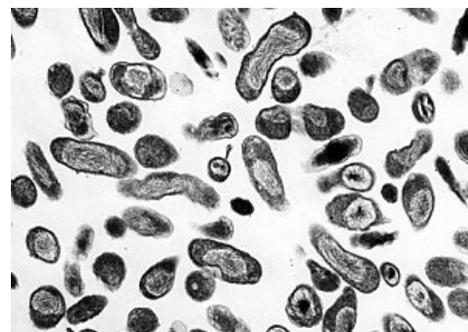
Q fever is an acute infectious disease with a pulmonary, flu-like, gastrointestinal or meningoencephalitic form.

Pathogenic agent

The cause of this disease is the gram-negative cocobacillus *Coxiella burnetii*. It multiplies intracellularly and is very resistant, especially to drying and lack of moisture. Due to its resistance, it can be used as a biological weapon.^[1]

Transmission

The source of the disease is livestock: sheep, cattle or goats. They are most infectious at birth, as the pathogen is concentrated in the placenta and amniotic fluid. Transmission can also occur through milk or urine. Due to its resistance, *Coxiella burnetii* can survive for a long time in dust and soil.^[2] Transmission may occur through contact with milk, urine or amniotic fluid of animals. The most common variant of transmission is aerosol and dust inhalation.^[3] **Infectious dose** is low, 1 to 10 bacteria are enough. **Incubation period** is 14–60 days. ^[4]



Coxiella burnetii

Epidemiology

Q fever first appeared in Australia in 1935. At first, the cause of the disease was unknown, and therefore the disease was named Q fever. Q means query.^[5] With the exception of a few countries in Europe and New Zealand, Q fever has been reported in all countries in the world. About 3% of the US population has antibodies to the pathogen, but there are only about 100 reported cases a year.

Symptoms

Q fever can occur as an acute or chronic illness, although an asymptomatic course is also fairly common. Symptoms of acute illness include: Fever, (up to 40 °C), headaches, nausea, muscle pain, chills, night sweats, vomiting, diarrhea, abdominal or chest pain. Výjimečně se akutní onemocnění může zkomplikovat (pneumonia, hepatitis, myocarditis). The mortality of hospitalized patients is below 2%. In 5% of cases, serious chronic illness occurs. This can manifest soon (6 weeks) after an acute illness or in several years. Patients at risk include pregnant women, immunosuppressed patients, and people with valve defects. In 60% of cases, it manifests as endocarditis.^[6]

Prevention, treatment a diagnosis

Lifelong immunity develops after undergoing infection. **Doxycykline** is the drug of first choice. Acute treatment lasts 2-3 weeks and chronic 18 months.^[7]

Links

Related articles

- *Coxiella burnetii*
- Rickettsioses

References

1. <https://www.muni.cz/vyzkum/publikace/574153>
2. <https://www.cdc.gov/qfever/stats/index.html>
3. <https://www.medicalnewstoday.com/articles/191799.php>
4. <https://www.qfever.org/aboutqfever.php>
5. <https://www.cdc.gov/qfever/stats/index.html>
6. <https://www.cdc.gov/qfever/symptoms/index.html>
7. <https://www.cdc.gov/qfever/symptoms/index.html>

