

Pasteurella

Template:Infobox - bakterie *Pasteurella* is one of several species: ***Haemophilus***, ***Actinobacillus***, ***Pasteurella***.

These are **pleomorphic** rods to cocci. They are **gram-negative**, immobile, aerophilic, microaerophilic, or even facultatively anaerobic. By fermentation, they form acids but do not form gas. They are **oxidase (+)** and **catalase (+)**. The most important representatives are *Pasteurella multocida*. *Pasteurellae* used to include *Yersinia pestis* (the causative agent of plague), *Francisella tularensis* (the causative agent of tularemia) and *Mannheimia haemolytica*.

Pasteurella multocida

This representative is one of the commensals in the upper parts of the respiratory system, especially in domestic animals. It causes **pneumonia** in cattle, sheep or poultry. It has a non-pathogenic effect on cats and dogs and occurs in the nasopharynx.

In terms of morphology, *P. multocida* is a gram-negative, non-sporulating and **immobile** coccobacillus with **bipolar staining**. We prove it on a medium with blood, it ferments **sucrose** and **glucose**. A typical broad zone of growth inhibition called **inhibitory zone** around penicillin can be seen on the medium Template:HVLP.

Transmitted by direct contact or inhalation. It reaches humans due to **animal scratches** (5 % through dogs and 30 % through cats). It obtains **endotoxin**, which causes tissue damage and is resistant to phagocytes. *P. multocida* mainly causes **local wound infections and animal bites**, which are often accompanied by complications such as abscesses, cellulitis, arthritis or osteomyelitis. It also causes pneumonia, CNS infections, endocarditis or meningitis.

Most antibiotics (amoxicillin Template:HVLP a clavunate or ampicillin Template:HVLP a sulbactam) are used for therapy. It is resistant to macrolides.

Other representatives include ***P. aerogenes*** (transmission after a pig bite), ***P. bettyae*** (detected from urine, newborn blood) or *P. canis* and *P. stomatis*, which is transmitted via dog bite.

Source

- ws:Pasteurella

related articles

- Yersinia pestis
- Tularemia

references

- VOTAVA, Miroslav, et al. Medical microbiology special. 1st edition. Brno: Neptun, 2003. 495 pp. ISBN 80-902896-6-5 .
- BEDNÁŘ, Marek, Andrej SOUČEK and Věra FRAŇKOVÁ, et al. Medical microbiology: Bacteriology, virology, parasitology. 1st edition. Prague: Marvil, 1996. 558 pp. ISBN 8023802976 .

Kategorie:Mikrobiologie Kategorie: Infekční lékařství