

Aeromonas and plesiomonas

Aeromonas a *plesiomonas* are fermenting, **oxidase positive** bacteria. They have **flagellas** which are located polar. They are important for climate change modeling or epidemiological studies.

Aeromonas

Template:Infobox - bacteria Aeromonas can be found in water, fish, meat, milk and vegetables but also in hospitals or distilled water tanks. They include:

- *Aeromonas hydrophila*,
- *Aeromonas caviae*,
- *Aeromonas sobria*.

They are short sticks with rounded ends, **gram-negative**, **catalase** and **oxidase positive**. They are motile. They produce secretory and superficial virulence factors. These factors include fimbriae, outer membrane proteins, capsule or lipopolysaccharides. They cause mild diarrhea, but also cholera-like diseases. They can also trigger sepsis, meningitis, cholecystitis or extraintestinal infections, especially in older men and in patients with weakened immune system.

We use aminoglycosides and fluoroquinolones to treat extraintestinal infections, for GIT infections antibiotics treatment is not used. They are resistant to ampicillin nor some cephalosporins. They produce **β-lactamase**. We can detect them in the stool using selective soils with the addition of ampicillin or on agar with the addition of thiosulfate, citrate, bile and sucrose. They form yellow colonies with a blue zone. Complete hemolysis appears on the blood agar, so they are indistinguishable from *E. coli*.

Plesiomonas

They were excluded from the family *Vibrionaceae* and assigned to *Enterobacteriaceae*. We rank only one species among them - *Plesiomonas shigelloides*. It occurs in tropical and subtropical waters, on animals such as cattle or pigs, but also on snakes, amphibians and insects.

They are **gram-negative**, mannitol-negative, non-sporulating sticks and also **toxicogenic**. Their features are the same as *Shigellas*, they stink on Endo and MacConkey soil. For cultivation we use the same agar as for *Enterobacteriaceae*. Infections manifest themselves in two ways - either as **diarrhea**, which is more watery to greenish-yellow or can foam, or as **septicemia**. The disease usually resolves spontaneously. If extraintestinal infections develop, we use broad-spectrum antibiotics.

Links

Related articles

- Vibrio
- Shigella (microbiology)

Bibliography

- VOTAVA, Miroslav, et al. *Lékařská mikrobiologie speciální*. 1. edition. Brno : Neptun, 2003. 495 pp. ISBN 80-902896-6-5.
- BEDNÁŘ, Marek – SOUČEK, Andrej – FRAŇKOVÁ, Věra, et al. *Lékařská mikrobiologie : Bakteriologie, virologie, parazitologie*. 1. edition. Praha : Marvil, 1996. 558 pp. ISBN 8023802976.

Template:Navbox - bacteria