

Bordetella parapertussis

B. parapertussis is a strictly aerobic bacterium, the special soil for cultivation is Bordet-Gengou soil (it contains potato extract with glycerin and 25% ram's blood), it also grows on blood and chocolate agar and on MacConkey soil. It is less demanding in terms of culture than *B. pertussis*, colonies are characterized by pronounced beta-hemolysis and a dark brown pigment.

The bacterium is oxidase-negative and urease-positive. Unlike *B. pertussis*, it does not form a pertussis toxin and also differs from it in its antigenic equipment. ^[1]

B. parapertussis is the causative agent of parapertussis (whooping cough syndrome). The disease is very similar to pertussis, the difference is mainly in the duration of cough, which is 31 ± 18 days for parapertussis, while it is 23 ± 11 days for pertussis. The route of transmission is droplets of infected aerosol, the incubation period is 7–10 days, the disease then takes place in three stages (catarrhal, paroxysmal and convalescent). *Bordetella* adhere to the ciliated epithelium of the airways, where they multiply, impair the function of the cilia and damage the mucosa. ^{[2] [3]}

Macrolides (clarithromycin, azithromycin) are the drug of choice in therapy, and tetracyclines, co-trimoxazole or chloramphenicol are also effective. The treatment should last for 14 days.

Vaccination against *B. pertussis* does not protect against *B. parapertussis* infection. ^[4]

References

References

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