



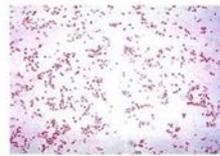
Brucellosis "Brucella canis"

A bacterial infection that affects a dog's reproductive tract. It can be caused by a few different species of organisms, and can be transmitted venereally, through shared water, or through contact with infected secretions or urine. It is possible to spread brucellosis between species.



Brucellosis is a common cause of late-term abortions in bitches, and infertility in dogs. The bacteria prefer to live in hormone-rich tissues, like those in the reproductive tract.

Testing is readily available, and it is recommended to test dogs prior to breeding (especially if you are in a high-risk area). Many of the tests are prone to false positives. Treatment is usually a combination of antibiotics for 6+ weeks.



Brucellosis "Brucella canis"

A bacterial infection that affects a dog's reproductive tract. It can be caused by a few different species of organisms, and can be transmitted venereally, through shared water, or through contact with infected secretions or urine. It is possible to spread brucellosis between species.



Brucellosis is a common cause of late-term abortions in bitches, and infertility in dogs. The bacteria prefer to live in hormone-rich tissues, like those in the reproductive tract.

Testing is readily available, and it is recommended to test dogs prior to breeding (especially if you are in a high-risk area). Many of the tests are prone to false positives. Treatment is usually a combination of antibiotics for 6+ weeks.

Article from the AKC Canine Health Foundation

Brucellosis

Brucellosis: An Overview

Brucellosis is a bacterial infection which affects the reproductive organs of both male and female dogs. The disease is spread by body fluids, with the main route of transmission being by sexual means. In addition to sexual means the disease can be transmitted by ingesting contaminated fluids such as vaginal discharge or urine. Airborne transmission is very rare but has been reported. The disease spreads quickly among dogs that are kept in closely confined areas especially during breeding times and when abortions occur.

Causes of Brucellosis

The causative agent for brucellosis is the bacteria *Brucella canis*. It is a gram-negative, rod shaped bacteria that resides inside the host's cells. It is because of this intracellular characteristic that brucellosis is difficult to treat. *Brucella canis* is also a concern because it is a zoonotic disease, meaning it can be transmitted to humans.

Prevention of Brucellosis

There is no vaccine to prevent brucellosis, but there are steps you can take to help prevent your dog from contracting the disease. Always keep your dog away from known carriers of the disease. Before breeding a brucellosis test should be performed on both the dog and the bitch; by doing so you will know if your dog is infected and will stop them from being infected by others. Routine disinfecting of areas is also advised.

Symptoms of Brucellosis

The classic sign of brucellosis is abortion during the third trimester of pregnancy. Other signs include stillbirths, conception failures and litter reabsorption. Signs that can be seen in the male are inflammation of the epididymis, the prostate gland, and of the sheath covering the testis. In both the male and female inflammation of the lymph nodes may be seen. Many dogs will not show signs of this disease at all.

Diagnosing Brucellosis

Brucellosis can be diagnosed by isolating and identifying the *Brucella canis* organism or by a blood test. The most common way of diagnosing brucellosis is by the Rapid Slide Agglutination Test (RSAT). This test is very sensitive but is not very specific. This means that it detects very small amounts of bacteria but does not differentiate between closely related bacteria types. False positive results for brucellosis are frequently produced when using this test. If your dog tests negative for brucellosis when using the RSAT you can be confident that your dog does not have brucellosis. If your dog tests positive further testing should be done to verify that your dog does actually have brucellosis.

Treating Brucellosis

There currently is no reliable treatment for brucellosis. In some cases long term antibiotic therapy has been successful in treating it but in other cases the disease persists regardless. The antibiotic therapy used consists of a combination of multiple antibiotics including doxycycline, minocycline, and streptomycin. In most cases the antibiotics will reduce the bacteria load in the blood stream but will not fully destroy all the bacteria present. Having your dog spayed or neutered is an option to control sexual transmission of the disease but is not a cure and your dog can still spread the disease by other means. In most cases euthanasia is the only permanent way to stop the disease from spreading.

Care for dogs with Brucellosis

If your dog has been diagnosed with brucellosis the first thing to do is quarantine them. This will help stop the spread of the disease. If you have other dogs in your house or kennel they should also be tested for brucellosis. The area where the infected dog was staying should be thoroughly cleaned with a disinfectant. Because brucellosis can be transferred from dogs to humans it is important to use caution when handling infected animals. Face masks, latex gloves, and eye protection should be worn when dealing directly with body fluids from infected dogs. If treatment is being pursued correct dosages and timing of antibiotics are important and your veterinarian's instructions should be followed precisely.

The AKC Canine Health Foundation and Brucellosis

The AKC Canine Health Foundation has funded 2 grants focused on finding better ways of diagnosing Brucellosis in dogs. Currently the methods of testing for brucellosis are not very definitive and many false positives occur. By using the PCR (polymerase chain reaction) technique it is possible to obtain a conclusive diagnosis earlier than with current testing methods. By perfecting this method owners will be able to be more certain of their test results when dealing with brucellosis. With your help we can continue this research and provide new and better means of diagnosing this disease.