

Swiss Run Greater Swiss Mountain Dog

Brucellosis

Brucellosis is a disease caused by a bacteria, *Brucella canis*. It is found throughout the world. The bacteria enters the body through mucous membranes and spreads from there to lymph nodes and the spleen. It also spreads to the uterus, placenta and prostate gland as well as other internal organs at times. This is not a very common parasite, but it can harm breeding animals especially female dogs.

Some signs of the parasite can be very vague in female dogs. Abortions commonly occur between 6-8 weeks after conception although pregnancy may terminate at any stage, and vaginal discharge may last for several weeks after abortion. In male dogs, infection of the testicles can lead to infertility due to anti-sperm antibodies developed as the body attempts to fight off the bacterial infection. The testes may atrophy after the initial period of swelling. Scrotal enlargement or infection of the skin over the scrotum may be seen. In both female and male dogs there may be infection of spinal discs, which can cause back pain, rear leg weakness, or even paralysis. Eye inflammation or cloudy eyes may be seen in either sex.

A blood test is the most common diagnostic tool to determine if your dog is positive for this bacterium. You can also look at the sperm from the male to check for sperm motility, immature sperm, and inflammatory cells. A lymph node biopsy could also be preformed and a pathologist can look at the sample to see if they detect the bacteria.

Brucellosis is very difficult to treat successfully. Tetracycline can be substituted for the minocycline to reduce costs but also lowers the effectiveness of treatment. All infected animals should be neutered or spayed to prevent sexually related transmission. All infected animals should be considered to be lifelong carriers of the disease, even if treated.

All breeding dogs should be tested for brucellosis before breeding. Breeding should be a deliberate choice -- not a random event! For breeding kennels, routine isolation of new dogs would be highly recommended. After isolation and negative tests when getting to the kennel and one month later, it should be safe to let the new dog mix with the others in the kennel. If infection is suspected at any time, quaternary ammonium (like Roccal Rx) and iodophor (Betadine Rx) disinfectants can kill *Brucella* organisms in the kennel to limit spread of the disease.

One last thing, it is possible that brucellosis caused by *Brucella canis* may be a zoonotic disease -- meaning that this organism could potentially infect people. It is something to think about when handling infected dogs. Wear gloves around any body fluids and be careful about contaminating yourself in any way. Unfortunately, the prognosis is guarded if your dog gets brucellosis. If treatments don't work, euthanasia is the next ethical treatment to prevent the spread of the bacteria.