



CASEOUS LYMPHADENTITIS

Caseous Lymphadenitis is a disease of sheep and goats that occurs across the U.S. but with variable incidence on individual farms. The causative agent is a bacteria, *Corynebacterium pseudotuberculosis*.

C. pseudotuberculosis can survive for months in organic matter such as bedding. The typical pathogenesis of the disease is that the bacteria gain entry into the animal from a wound such as a shearing nick, a nail poking out of a fence, or grass awns in hay. The bacteria will then localize in an abscess that the animal walls off from the rest of its body. The clinical signs of the disease is one or more abscesses that are often located just beneath the skin. However, if the bacteria is spread throughout the bloodstream, abscesses may also develop in internal body organs such as the lungs. In this case superficial abscesses may not be present and the only thing that the shepherd notices is a very thin debilitated animal.

In regards to treatment, antibiotic treatment is ineffective due to the inability of any antibiotic to get inside the abscess. The best therapy for superficial abscesses is to lance the abscess and flush the inside of the abscess with iodine. The material or pus that is present in the abscess should be disposed of in such a way as to avoid contamination of bedding to prevent further infection. Many shepherds will isolate the affected sheep, lance the abscess in an area where the sheep are not kept, and keep the sheep isolated until the wounds heal. Often the abscesses are not found until shearing time when the shearer inadvertently nicks wall of the abscess. If this occurs shearing should stop and the equipment and shearing carpet should be disinfected as well as possible. Also, to prevent infection in young sheep the shearing order should be the youngest to the oldest.

The vaccine for sheep against *C. pseudotuberculosis* that is available is called Case-Bac and is manufactured by Colorado Serum. A recent study published in the June 1, 1998 issue of the Journal of the American Veterinary Medical Association showed a significant reduction the number of abscesses. In this study, the researchers took bacterial cultures and inoculated the sheep in numerous places including the lips and skin. After twenty weeks the sheep were euthanized and the carcasses were examined for abscesses. Vaccinated sheep had on average 1.3 abscesses compared to 33.1 abscesses in the control sheep.

A side effect that we have seen with use of the vaccine is that this product causes a large number of injection site lesions or abscesses. Therefore if a farm has not had problems with caseous lymphadenitis in the past, vaccination is unnecessary. In farms that have serious continual problems, vaccination along with isolation and sanitation is beneficial.