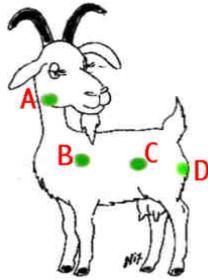


The green spots are common areas to watch for lymph node enlargement due to abscess formation in caseous lymphadenitis. (Diagram Courtesy of: [www.GoatWorld.com](http://www.GoatWorld.com))



## DIAGNOSIS

Diagnosis is based on clinical signs detected by sight and by physical examination. Abscesses range from firm to soft swelling, and some are well-defined with rounded shapes on the surface of the animal's body. Generally external abscesses are responsible for disease transmission. If an animal is experiencing chronic weight loss it may be carrying internal abscesses on vital organs. Unfortunately internal abscesses are fatal and cannot be seen, except by X-ray, biopsy, or postmortem examination (after the animal is dead). Serologic tests are available, but their reliability is questionable. *C. pseudotuberculosis* can be cultured from smears of lesions on blood agar under aerobic conditions at 37°C to confirm gram-positive bacilli and identified using biochemical test criteria.

## PREVENTION THROUGH MANAGEMENT

Avoid purchasing animals with visible abscesses or abscess scars.

Conduct routine, visual examinations of the herd, noting the presence of abscesses.

Always disinfect equipment such as ear taggers or hoof trimmers that might break the skin of animals when used.

If you have an animal that develops an abscess you should immediately isolate the animals from the herd and call to make an appointment with your local veterinarian to check your animal.

## TREATMENT

Your vet may completely remove an external abscess surgically, however this is costly.

Incision and drainage of the abscess has been found to be effective as long as the animal is kept from the rest of the herd until the abscess is completely healed.

Disinfect areas where animals with abscesses were housed and keep records of abscess cases.

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# CASEOUS LYMPHADENITIS (CL)

(ABSCESSTION IN GOATS)

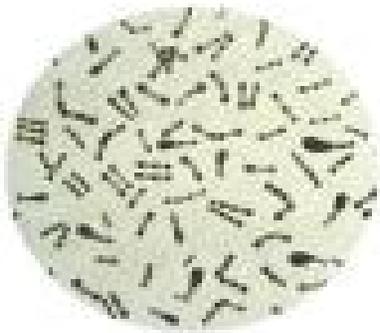


Caseous lymphadenitis (CL) is a chronic disease that affects a goat's lymphatic system and is characterized by an external abscess – lump. CL manifests itself either internally, externally, or both and is very contagious to all other goats. The disease causes significant economic losses in the goat meat industry due to the condemnation and downgrading of carcasses, and to the farmer due to decreased body weights. Caseous lymphadenitis occurs worldwide in goats and sheep.

### ETIOLOGY

Caseous lymphadenitis is a bacterial infection caused by an aerobic, gram-positive bacillus, *Corynebacterium pseudotuberculosis*.

The CL bacteria can be found in the soil of contaminated pens and pastures, on feed and water troughs, and in shelters and other congregation points.



Gram stain of *Corynebacterium*.

### CLINICAL FINDINGS

Abscessation of one or more superficial lymph nodes is the main finding in clinically affected animals. Progressive debilitation occurs with chronic infections, particularly if chronic abscesses spread to the internal organs and lymph nodes via the blood or lymphatics. The incidence is generally higher in older animals.

Lesions in the lungs may produce mild symptoms of respiratory tract infection (coughing, difficulty breathing, and discharge from the eyes and/or nose). Affected goats may exhibit no specific clinical signs other than the occasional generalized infection such as fever, anorexia, anemia, and cellulitis at the site of infection. Frequently, there are no specific clinical signs with the visceral (internal) form.



Internal CL abscess in goat liver and lung



CL abscess

### PATHOGENESIS

Infection is spread by direct contact of pus from ruptured abscesses and from nasal and oral secretions. Animals can acquire infection orally when ingesting contaminated feed or grass. A wound or some other mode of traumatic inoculation such as insect bites is considered necessary for *C. pseudotuberculosis* to penetrate the skin and disseminate to the mucous membranes of the gastrointestinal and respiratory tracts. Spread of the infection from the respiratory tract to other body systems can occur. As the disease advances, there is a progressive loss of condition and the animal eventually becomes emaciated. The visceral form causes a debilitating condition often with a reduced reproductive efficiency. Once infected the animal is considered to be a carrier for life.