Caseous lymphadenitis, also called “CL” for short, is a chronic contagious disease which affects mainly sheep and goats. It is caused by a bacterium called Corynebacterium pseudotuberculosis and is characterized by abscess formation under the skin, lymph nodes, or internal organs.

Infected sheep or goats with open abscesses represent the main source of infection. The bacteria that drain from an open abscess contaminate the environment and can persist for several weeks to months in the environment. Healthy animals become infected when the bacteria enter the body mainly through superficial skin wounds but may also become infected by ingestion or inhalation of the organism. The bacteria then spread to the lymph nodes or internal organs over a period of 2 to 6 months. Unfortunately, once infected the animal carries the infection for the rest of its life.

Goats usually develop the “external form” of CL which is manifested by abscess formation in the external lymph nodes of the head and neck. The owner will notice one or several small lump(s) under the skin (usually in the head and neck area) which enlarge over time; the majority will rupture and drain greenish-white thick material. Sheep on the other hand, usually develop the “internal form” of CL which is manifested by abscess formation inside of the body.

Affected animals usually eat well at first but then will lose weight over several weeks to months and become very thin.

Therefore, the presence of skin abscesses around the head & neck of small ruminants is highly suggestive of CL. However, a definitive diagnosis can only be made by submitting a culture of the abscess contents. If abscesses are suspected inside the body, ultrasound and/or a blood test (this test detects the presence of antibodies to the CL organism) may be needed to confirm the diagnosis.

Controlling the disease and minimizing its impact can be helped by following these guidelines:

- Remove environmental hazards that lead to skin injury (ex: barbed-wire fencing, feeding troughs with jagged edges)
- Minimize the spread of the disease by disinfection of shearing blades, tagging & tattoo

equipment, tail docking implements, hoof nippers, and the use of new needles between animals.

- Test the existing herd and all animals prior to adding new ones to the herd with the blood test, which detects the presence of antibodies against CL. This will help decrease the number of animals which are carrying the organism from being placed in the herd. Also, carefully inspect new entries to the herd or flock for the appearance of lumps or scars around the head and neck which could be an indicator of previous infection.
- Remove animals with abscesses or that have had previous abscesses from the herd along with ones with a positive antibody test for CL to limit spread in a herd. If animals with active disease cannot be removed from the herd they should be separated completely from CL-free animals (by a least 20 feet) and managed independently.
- Finally, vaccination may be helpful in limiting the spread of the disease in sheep. A vaccine is currently available but is only USDA approved for use in sheep. It is 90 percent effective in sheep. Even though the vaccine is not USDA approved for use in goats, some studies have shown a 50-60 percent success rate in limiting the disease in goats. It should be pointed out that vaccination does not cure an infected animal. There can be vaccine associated side effects, so be sure to ask your veterinarian about this potential problem if a vaccination program is to be used.

This column is provided by the faculty of the OSU Boren Veterinary Medical Teaching Hospital.

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