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CASEOUS LYMPHADENITIS IN A WHITE-TAILED DEER

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Abstract: A road-killed male white-tailed deer (*Odocoileus virginianus*) was brought to the laboratory for diagnosis of multiple thoracic abscesses. Caseous lymphadenitis was diagnosed on the basis of gross pathological lesions and microbiological examination.

HISTORY

On February 9, 1972, an adult male white-tailed deer, the victim of a road accident, was presented for necropsy. The animal had been eviscerated. With the exception of leg injuries received in the accident, the deer appeared to be in good physical condition. Inside the thoracic cavity there were eight well-encapsulated abscesses measuring from 3-10 cm in diameter. The largest abscess was compressing the thoracic aorta on its left side.

MATERIALS AND METHODS

Two abscesses were lanced and found to contain thick, creamy greenish-yellow pus. Samples of pus were streaked on blood agar plates and incubated at 37 C under normal atmosphere. Plates were examined after 24 and 48 hours and smears made from bacterial colonies for staining and microscopic examination.

RESULTS

Pure bacterial cultures were observed on blood agar after 48 hours incubation. Organisms from several colonies were gram-positive pleomorphic rods, identified as *Corynebacterium pseudotuberculosis* on the basis of morphology, growth characteristics and staining features.

DISCUSSION

Caseous lymphadenitis (pseudotuberculosis) in sheep is caused by the bacterium *Corynebacterium pseudotuberculosis*. Records of the Department of Veterinary Science, Moscow, Idaho, show that pseudotuberculosis is common in sheep of the area. The disease is characterized by a chronic course, frequently with caseation necrosis of lymph nodes and secondary generalized abscess formation. Generalized infection causes a toxemia leading to emaciation, cachexia and death. A detailed description of the disease can be found elsewhere.⁵

Caseous lymphadenitis has been reported in various wildlife species,^{1,2,3,4} but documented reports in white-tailed deer are lacking. Hammersland and Jones-child³ described two cases of pseudotuberculosis in deer in Montana, but failed to indicate which species of deer was involved. The diagnosis of caseous lymphadenitis in a white-tailed deer shows that this species is susceptible to the disease. Reports by hunters who have observed abscesses in white-tailed deer suggest that this disease is not uncommon among deer in northern Idaho. Whether the disease of deer is confined to previous and present sheep grazing areas or whether it is more general in distribution is unknown.

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