

Caseous lymphadenitis



Caseous lymphadenitis is a chronic and subclinical disease of sheep and goat of worldwide distribution. It is also infecting cattle and horses, and rarely, humans; thus, it is considered an occupational zoonosis. The pathogen has been isolated from other species, including pigs, buffaloes, deers, porcupines, llamas, camels and laboratory animals.

Dromedary camel infections with pyogenic bacteria *Corynebacterium pseudotuberculosis* (and *C. pyogenes*) are common particularly in the form of lymphangitis.

Etiology:-

Corynebacterium pseudotuberculosis its causal agent. It is small club-shaped rod (1-2 μm) Gram-positive, nonencapsulated and nonsporing bacteria. It produces lesions similar to those of tuberculosis. In stained smears, the rods appear isolated and have pleomorphic forms, from coccoids to filamentous rods, grouped in parallel cells or in a format similar to Chinese letters.

Epidemiology:-

The disease was reported from several countries in Middle East (Egypt, KSA, UAE, Iran), Asia (India, China, Russia), East Africa (Kenya and Ethiopia) and Australia. *C. pseudotuberculosis* strain was isolated in Saudi Arabia from eight camels with caseous lymphadenitis. Postmortem revealed emaciation and presence of multiple external and internal abscesses particularly in the lungs and liver. The body lymph nodes were enlarged and congested but without abscesses formation. In Ethiopia reported a chronic condition locally called mala in adult camels which resembled caseous lymphadenitis in small ruminants.

C. pseudotuberculosis infection in Dromedary camels produced a chronic disease (Caseous lymphadenitis) in adult camels. Clinically and pathologically, the disease in adult camels generally resembled that of sheep with the exception of: (1) the predominance of muscular and subcutaneous abscesses, (2) the lymph nodes were



slightly enlarged and congested without development of lamination or caseous necrosis, although they contained *C. pseudotuberculosis* and (3) the abscesses contained homogenously thin creamy yellowish white pus.

Diagnosis:-

By Isolation and typing of bacteria.

Prevention and control:-

More studies needed to find effective vaccine against this disease in camels.

References:-

1. Azmi Dawood Hawari- American Journal of Animal and Veterinary Sciences 3 (2): 68-72, 2008- *Corynebacterium pseudotuberculosis* Infection (Caseous Lymphadenitis) in Camels (*Camelus dromedarius*) in Jordan.
2. Alessandro de Sá Guimarães^{1,3}, Filipe Borges do Carmo^{1,3}, Rebeca Barbosa Pauletti¹, Nubia Seyffert², Dayana Ribeiro², Andrey Pereira Lage^{1,3}, Marcos Bryan Heinemann^{1,3}, Anderson Miyoshi², Vasco Azevedo^{2,3} and Aurora Maria Guimarães Gouveia^{1,3}- The IIOAB Journal- CASEOUS LYMPHADENITIS: EPIDEMIOLOGY, DIAGNOSIS, AND CONTROL.