

DIAGNOSTIC STUDY ON CASEOUS LYMPHADENITIS (CLA) IN SHEEP, GOATS AND CAMELS IN SOME YEMENI PROVINCES

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ABSTRACT

A diagnostic study on CLA in sheep, goats and camels was conducted to evaluate the causative bacterial organisms incriminated in the aetiology of abscesses in affected animal. From the site of abscesses, 78 pus samples (42 from sheep, 30 from goats and 6 from camels) were collected and subjected to bacteriological examination. Bacteriological investigation, revealed that *Corynebacterium pseudotuberculosis* was the most prevalent organism encountered in sheep, goats and camels abscesses in Dhamar and Al-Hodiedah provinces and abattoir, which constituted 53.7% of the total isolates. Other finding of interest was the isolation of *Staphylococcus aureus subspecies anaerobius* 19% (18 isolates), 11 isolates from sheep and 7 isolates from goats. This is the cause of abscess disease, and this is the first report of abscess disease in Yemen. Other pathogenic bacteria isolates from CLA abscesses, either in association or not, with *C. pseudotuberculosis* included *Beta haemolytic streptococci* (13.7%), *Staphylococcus aureus* (9.5%), *Pseudomonas aeruginosa* (2.1%), *Actinobacillus lignieresii* (1.0%) and *Proteus mirabilis* (1.0%).

Keywords: Caseous lymphadenitis (CLA), *Corynebacterium pseudotuberculosis*, abscesses, Camels

INTRODUCTION

Sheep, goats and camels breeding had great economic and social importance in Yemen, with an estimated population of about (8,889,213), (8,708,122) and (373,011) respectively (Agricultural statistics book, 2008). They contribute largely to the domestic meat demand and are considered as the means of life and the main sustenance for most Yemeni families, where these animals are known as "moving banks of shepherds".

In Yemen, these animals are raised under traditional systems where natural grazing constitute the main source of nutrition. Animals at pasture may face the risk of many infectious diseases, particularly in the presence of adverse environmental conditions which lead to significant economic losses for owners. Caseous lymphadenitis (CLA) is one of these diseases which is considered as one of the most important problems for animal breeders especially sheep and goats, in numerous provinces of Yemen where its local and common name is "SANAFIR" (Saeed, 1997; Hanon, 1997).

Caseous lymphadenitis is a chronic infectious disease, caused by *Corynebacterium pseudotuberculosis* and it is characterized by encapsulated abscesses in superficial lymph nodes and can also affect internal lymph nodes and organs such as lungs, livers and kidneys (Baird and Fontaine, 2007). The disease occurs worldwide including several Arabic countries such as Saudi