

COMPLEMENTARY STUDIES ON GANGRENOUS MASTITIS IN GOATS

By

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SUMMARY

Fourteen normal-lactating udders of ewes and goats as well as 15 udders from goats suffering from gangrenous mastitis were subjected to angiommammographical and microcirculatory studies. It was found that the normal ewe's udder exhibited a well developed vascular pattern rather than goat's udder. Udders of goats affected with gangrenous mastitis showed obliteration of some of the blood capillaries and narrowing in diameter of others. Histopathological studies of udders of 10 goats suffering from gangrenous mastitis showed vascular changes including connective tissue proliferation surrounding the blood vessels, swelling of their endothelial lining and thrombus formation. Tissue changes were seen in the form of atrophy and desquamation of the epithelial lining of the acini.

INTRODUCTION

Gangrenous mastitis seems to be the most common sequel of mastitis especially in goats which may lead to emaciation, toxæmia and usually terminates in death of the animal (Khamis and Saleh, 1972). Attempts have been made by many authors (Bozhilov, Backurdjiev and Yordanov, 1967; Rao and Seitharman, 1967; Rossis, 1972; Tontis, 1974; El-Sergany, Fahmy, Hegazy and Bakeer, 1982) to elucidate the probable cause of the disease. However, isolation of microorganisms from gangrenous mastitic udder does not mean that the isolated microorganism is the only cause of the disease as Khlossy (1978) failed to induce gangrenous mastitis in healthy goats after inoculation of *Staphylococcus aureus* isolated from clinically diseased animals.

The purpose of the present work is to determine if there is a correlation between the vascular changes and rapid evolution of gangrenous mastitis in goats through angiommammographical and microcirculatory as well as histopathological studies.

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