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STUDIES ON THE PATHOLOGICAL AFFECTIONS OF THE LYMPHATIC SYSTEM OF SLAUGHTERED RUMINANT AT ALEXANDRIA PROVINCE

A Thesis Presented

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قرار لجنة الحكم والمناقشة

قامت لجنة الحكم والمناقشة بفحص الرسالة ووجدت ان لها قيمة علمية حيث انها اشتملت على بحوث هادفة. كما قامت اللجنة بمناقشة المتقدم مناقشة مستفيضة ووجدت انه يلم الماما كاملا بكل ما جاء بها.

لـــــذ لـــــك

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Introduction

INTRODUCTION

The ruminant animals are considered as the main source of meat production for human consumption, therefore any factors affecting their growth and health condition can be reflected on human being and their life.

The resistance of animal body to infections depends up on many factors including, among others, quantitative and qualitative function of the lymphatic system. This draws the attention to study the various affections in the lymphoid organs which are considered as a mirror reflecting many diseased conditions and disturbances.

The lymph nodes as important organs of the reticuloendothelial system, having certain principal functions beside producing cells of the lymphocytic series, they act as a mechanical filters and settling chambers for the removal of injurious agents, erythrocytes and any other particular substances from the lymph of the drained organs in the body. For example in those cases of respiratory affections with tuberculosis, it is known that the tuberculous lesions are usually present in lymph nodes associated with the respiratory tract in approximately 90 percent of reactors with confirmed infection, while the lung lesions are found in only 1 to 2 percent of such cases during abattoir examination ***(McIlroy et al., 1986)***.

Similarly, spleen is an important organ of the hemopiotic as well as reticuloendothelial system. Beside its cytogenic function, the spleen serves in a limited capacity as a reservoir for blood. The removal or

complete affection in the spleen of some animals that have inapparent protozoan disease, may result in clinical illness and death. On the same time the removal of spleen in those normal animals makes them more susceptible to certain protozoan diseases e.g. babesiosis or anaplasmosis. The evaluation of the net results of splenic affections thus becomes more than a little complicated for those difficulty of recognizing each cell type and the total impossibility of ascertaining the functions and the purposes of the cells by means of microscopic sections. While, the term splenitis is in use by some to refer to some of the cellular accumulations to which allusion has just been made, it is usually preferable to limit the concept of splenic inflammation to those infrequent cases where the spleen itself is the object of attack and to view its various reactions to generalized disease as functional changes designed or fitted, as they certainly are, to counteract certain disorders of the body as a whole through the medium of its circulating blood.

The present work aimed to describe and identify the different types of affections in the lymphoid organs, particularly lymph nodes as well as spleen, which commonly existing in the various ruminant animals that slaughtered in slaughterhouses at Alexandria.

Review of Literature

REVIEW OF LITERATURE

I. Affections in large ruminants:

Samuel et al. (1981) studied the distribution of Salmonellas along the gastrointestinal tract and in associated lymph nodes in 100 sheep and cattle at slaughter. The contents of the rumen, abomasum, ileum, caecum and rectum were sampled, together with the lymph nodes draining each of these sites. Seventy seven of the cattle were carrying Salmonellae, including 61 with infected lymph nodes; whereas only 43 sheep were infected, 14 of them with infections in the nodes. In cattle Salmonellas were frequently present, usually in large numbers, in lymph nodes draining the ileum, caecum and colon, but rarely in the ruminal and abomasal nodes; however this difference was not apparent in sheep.

Jones and Hunt (1983) discussed numerous cases of splenic affections. In severe cases of hemorrhages, the spleen became small, dry and atrophic, in other words simply empty, for no living thing perishes without exhausting every resources that might counteract the attack which threatens it. The same is generally true in case of many diseases which destroy blood cells (hemolytic anemias), although the picture in such cases is influenced by accumulation of various white cells if the cause is an infection, by the presence of hemopoietic cells in some anemias, by increase of phagocytic reticulo-endothelial cells needed to dispose of fragmented erythrocytes or other waste particles, by the augmentation of reticulo-endothelium for the production of