



Lymphocyte population in the granulomatous lesions of wild-boars (*Sus scrofa*) suspected of tuberculosis.

Introduction: Tuberculosis is an infectious disease that threatens the lives of millions of people both in developing and developed countries and is responsible for important economical losses in farm animals. The pathogenesis of bovine tuberculosis due to *Mycobacterium bovis* and human tuberculosis mainly caused by the microorganism of the species *Mycobacterium tuberculosis* are more extensively characterized. However, tuberculosis also affects other animal species and these are often responsible for the contamination of cattle and humans. In particular, an overview of the wildlife hosts will provide insight into how these reservoirs maintain and spread the disease.

Material and methods: This study was conducted to evaluate the chronic inflammatory response in wild animals with a presumptive diagnosis of tuberculosis. In order to better understand the pathogenesis of the disease and further characterize its lesions, it was our aim to investigate the expression of antibodies anti-CD3 and anti-CD79 α in the granulomatous lesions of wild boars' mesenteric lymph nodes (n=30) through the immunohistochemistry technique.

Results: Immunohistochemical analysis allowed us to observe the lymphocyte cells population in 11 mesenteric nodes (36.6%) for the anti-CD79 α antibody, and in 15 mesenteric nodes (50%) for the anti-CD3 antibody. The quantification of these same cells allowed grouping of lesions depending on the percentage of lymphocyte cells that they exhibit.

Conclusion: The lesions of this study showed relatively similar percentages of B and T lymphocytes, thus suggesting a cellular and humoral response and a similar immune response triggered by the organism against the entry of the pathogen.