

ULTRASTRUCTURAL ANALYSIS OF EFFECTS OF *Anaplasma platys* ON DOGS SKELETAL MUSCLE

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Anaplasma platys (*A. platys*) is the etiologic agent of Infectious Canine Cyclic Thrombocytopenia. This disease is one of the Rickettsiales pathologies common in dogs. The agent is transmitted through the bite of an infected tick (*Rhipicephalus sanguineus*) or other arthropod. The aim of the present investigation was to study the ultrastructure of semitendinosus muscle from dogs positive to *A. platys* and negative animal controls selected by blood smear examination. Muscle biopsies were processed by routine techniques for transmission electron microscopy. Muscle alterations varied from slight to severe, including atrophy, mitochondria showed a matrix with different electron densities and there were observed different kinds of lysosomes. More severe alterations were in intramuscular capillaries. These exhibited hypertrophy of endothelial cell cytoplasm with autophagic vacuoles and partially or totally occluded lumen. Basement membrane was widened and reduplicated. Pericytes exhibited a cytoplasm with proliferative changes. The mononuclear cell infiltrate consisted of macrophages and lymphocytes. Observed alterations in intramuscular capillaries could be responsible for alterations found in the muscle fibers studied in this work. Described alterations have been reported in muscle disorders with an autoimmune component.