Effect of oil copaiba oils on the skeletal muscle of rats submitted to chronic alcoholism

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In the occident in each 1 million adults about of 20.000 present disturbances in the skeletal muscles as a consequence of the alcoholism. The alcohol promotes reduction of RNAm and of the synthesis of proteins, carting predominant atrophy on the fibers of the type II. Besides, this substance alters the muscular metabolism through the decrease of the activity glycolytic and of enzymes related with the support of energy, provoking fall in the muscular acting. The cellular alterations can be current also of the high concentration of elements reagents of oxygen that the chronic alcoholism induces. The diversity of the Amazonian is considered supplying of medicinal species for production of medicines. The extracted oil of the tree of the gender Copaifera sp presents outstanding anti-inflammatory action and antioxidant. In view of the properties of this oil in association with the harmful mechanisms of the alcohol, the work aimed at to evaluate the possible morphologic alterations in the abdominal straight muscle of mice submitted to the experimental chronic alcoholism and treaties with oil of copaiba. Forty mice (Rattus novergicus albinus) of the lineage Wistar, males, distributed in Control Group (CG), Alcoholism Group (AG), Detoxicated Group (DG) and Treatment Group (TG). CG received water and diet solid ad libitum for a period of 21 weeks. The other groups received liquid diet the base of ethyl alcohol with concentrations progressively larger it ties the twentieth week of the experiment. From the twentieth first week of the experiment on, the alcohol concentration of groups DG and TG went down gradually, being still supplied to the group TG - to leave that period and until the twenty fifth week of the experiment - 1 mL of copaiba oil through gavage. Fragments of muscular fabric were processed in histological and red-faced routine by Hematoxylin-Eosin (HE) and Masson Tricromic. After they were analyzed by morphometric study. The histologic analysis of the sheets didn't evidence infiltrated inflammatory among the muscular fibers, apoptotic bodies, area of cellular destruction for necrosis or bunches of deposit intercellular of collagen in the studied groups. Moreover, GA presented smaller area and there was difference statistically significant in the area of section transverse among all of the groups, except among the groups Detoxicated and Treatment. The model of administration of the oil copaiba used in this work did not show significant effects on skeletal musculature of rats submitted to chronic alcoholism experimental.

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