

The effect of copaiba oil in mice's large salivary glands submitted to an experimental chronic alcoholism

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The alcohol in excess is widely absorbed by the digestive system causing functional alterations in the constituent organs, including the salivary glands. The Copaiba's oil has, among other functions, an antioxidant action already proved by the scientific literature. Thus, the authors objectify evaluate the copaiba's oil effect in the major salivary glands of rats submitted to experimental chronic alcoholism. Forty rats (*Rattus norvegicus albinus*) were used and divided in four groups of 10 animals each. The Control Group (CG) received water and ration ad libitum in a period of 21 weeks. The Alcoholism Group (AG) received a liquid diet with absolute ethyl alcohol diluted in water (20% of alcohol and 80% of water) for 20 weeks. The Desintoxicated Group (DG) received the same AG's diet, however it suffered an alcoholic desintoxication departing from the 20th week. The Treatment Group (TG) passed by the same DG's process, but it received 0,63 mL/kg of copaiba's oil for gavagem, departing from the 22nd week. The CG and AG suffered euthanasia after 20 weeks while DG and TG just after 26 weeks. Some fragments of the parotid, submandibular and sublingual glands were prosecuted in histologic routine and stained with Hematoxylin/Eosin (HE) and acid Periodic acid-Schiff (PAS). The section stained with PAS didn't show any alteration of glycogen accumulate. In the other section, stained with HE, all the glands of AG and DG exhibited a light greasy infiltration and a light interstitial (more evident in AG). TG's animals showed parotid glands with interstitial fibrosis and the submandibular and the sublingual glands didn't introduce any alteration. Therefore, it's concluded that copaiba's oil has an attenuator effect in the histopatolgics alterations verified in rat's large salivary glands submitted to an experimental chronic alcoholism due to promote a regression of the greasy infiltration and the interstitial fibrosis caused by the prolonged use of the alcohol.