EVALUATION OF THERAPEUTIC POTENTIAL OF AQUEOUS FRUIT PULP EXTRACT FROM COPERNÍCIA CERIFERA MART. IN DYSLIPIDEMIC MICE

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Introduction: Chronic non transmissible diseases (CNTD) are main health problem in a world scale. Food is one of determining factors of human health then there are many researches in order to obtain more specific information for reducing such illnesses. Studies regarding the chemical characterization and biological effects of carnauba aqueous fruit pulp extract are not reported in the literature. Objective: Evaluation of therapeutic potential of aqueous pulp fruit extracts from Copernicia cerifera Mart. in dyslipidemic mice. Methods: The study was developed in mice groups that received a hypercholesterolemic diet and were treated with aqueous pulp extract (dose of 150 e 300 mg/kg) e Sinvastatine (dose of 20mg/kg) as reference drug. Blood samples were collected to lab exam determination (total cholesterol, triglycerides, high density lipoprotein and glicose), urea (URE), creatinine (CRE), aspartate aminotransferase (AST) and alanine aminotransferase (ALT) were also performed. Cervical dislocation was used to Euthanize mice to remove liver and kidneys for histopathological analysis and oxidative stress evaluation. Results: Pulp aqueous extract presented important effects in cholesterol, triglycerides and oxidative stress. However, it showed no apparent toxicity by plasma levels of AST, URE, CRE and by inflammatory process reduction presented by hepatic and renal histopathology. Conclusion: Animals treated by aqueous pulp extract of carnauba fruits are promising, suggesting that such extract can have substances with therapeutic potentialities in prevention and treatment of diseases associated with lipid metabolism. Nevertheless, other preclinical and clinical studies are necessary to assure and validate its real therapeutic use.

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Keywords: Copernicia cerifera Mart., hypercholesterolemia, triglycerides.