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

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Introduction: Carnauba tree is a Brazilian Northeast native plant and it has a great economic, social and ecological importance for the Northeastern semi arid area. The plants, besides being very often used as food, are also used for treating many diseases in traditional culture. Researches in natural product field revealed that Copernicia cerifera Mart. presents hypoglycemic and lipid lowering potentials. **Objective:** Evaluate therapeutical potential of Copernícia cerifera Mart. methanolic fruit pulp extract on dyslipidemic mice. **Methods:** The study was developed in mice groups that received a hypercholesterolaemic diet and were treated with metanolic pulp extract (a dose of 150 e 300 mg/kg) and Simvastatine (dose of 20 mg/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:** Daily supplementation of 150 and 300 mg/Kg/day doses of methanolic extract did not decrease hypercholesterolemia diet effects. However, it reduced significantly plasmatic triglyceride levels at 300 mg/Kg dose when compared to standard diet. Concentrations of malondialdehyde on hepatic tissue were similar to default group on same dose. It was observed a little decrease of steatosis on animals as well as inflammatory process at 300 mg/Kg dose. **Conclusion:** The results point out to a potential use of methanolic extract of Copernicia cerifera Mart. fruit pulp extract at 300 mg/Kg dose for reducing triglycerides serum, oxidative stress, steatosis and inflammation, presenting promising results for dyslipidemia treatment and, consequently, an important cardioprotective effect.

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Keywords: *Copernicia cerifera*, hypercholesterolemia, triglycerides.