

عنوان مقاله:

Effects of Salvia Officinalis L. Extract on Biochemical Blood Parameters in Male Rats

محل انتشار:

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خلاصه مقاله:

Background and Objective: salvia officinalis L. consists of, glycosides, flavonoids, and anthocyanins. Due to the increasing use of medicinal plants in treatment of diseases and their side effects on various organs, this study was conducted to evaluate the effect of salvia officinalis on biochemical blood parameters in male rats. Materials and Methods: In this experimental study, ۲۴ male Wistar rats were randomly assigned to four groups of ۶ animals each. The control group received normal saline and treatment groups received ۷۵، ۱۵۰ and ۳۰۰ mg/kg body weight of salvia extract for ۱۴ days. Body weight was measured in days ۰، ۷، and ۱۴. At the end of the experiment, serum levels of liver function enzymes such as AST and ALT, total proteins, albumin, creatinine, cholesterol and triglyceride were assessed. Results were analyzed using one- way ANOVA and Tukey test. Results: According to the results, plasma concentrations of protein, albumin and creatinine showed a significant increase ($P < 0.05$) but, a significant decrease was observed in liver enzymes. No significant changes were observed in serum cholesterol, triglyceride levels and body weight in the control and salvia groups ($P > 0.05$). Conclusion: The results indicated that Salvia Officinalis probably contains flavonoidic components with antioxidant effect leading to the increase in albumin and decrease in liver enzymes. References ۱- Katzung B, Masters S, Trevor A. Basic & clinical pharmacology. Newyork: Mc Graw-Hill Medical. ۲۰۱۱. ۲- Glisic SB, Ristic M, Skala D, Ivanovic J. Extraction of sage (salvia officinalis L.) by supercritical CO₂: kinetic data, chemical composition and selectivity of diterpenes. J Superitica Fluids. ۲۰۱۰ ۵۵(۱): ۶۲-۷۰. ۳- Oboh G, Henle T. Antioxidant and inhibitory effects of aqueous extracts of salvia officinalis leaves on pro-oxidant-induced lipid peroxidation in brain and liver in vitro. J Med Food. ۲۰۰۹ ۱۲(۱): ۷۷-۸۴. ۴- Wang M, Shao Y, Li J, et al. Antioxidative phenolic glycosides from sage (Salvia officinalis). J Nat Prod. ۱۹۹۹ ۶۲: ۴۵۴-۶. ۵- Baricevic D, Sosa S, Della Loggia R, et al. Topical anti inflammatory activity of Salvia officinalis leaves. J. Ethnopharmacol. ۲۰۰۱ ۷۵: ۱۲۵-۳۲. ۶- Weiss RF, Fintelman Volker. Herbal Medicine Germany: Thieme Verlag. ۲۰۰۱. ۷- Orhan I, Kartal M, Naz Q, et al. Antioxidant and anticholinesterase evaluation of selected turkish salvia species. Food Chemistry. ۲۰۰۷: ۱۰۳: ۱۲۴۷-۵۴. ۸- Tepe B, Eminagaoglu O, Akpulat H, Aydin E. Antioxidant potentials and rosmarinic acid levels of the methanolic extracts of ... Salvia verticillata (L.) subsp. Verticill

کلمات کلیدی:

Keywords: Liver enzymes, Blood parameters, Salvia extract, Male rat

