ABSTRACT

THE EFFECTS OF LEAF EXTRACT OF SINGAWALANG (Petiveria alliacea L.) TO THE TRIGLYCERIDE LEVELS REDUCTION IN WHITE RAT (Rattus norvegicus L.) HYPERCHOLESTEROLEMIA

Winda Dwi Putri, 011211131072. Faculty of Medicine, Airlangga University, Surabaya, Indonesia.

Introduction: Hypercholesterolemia is a condition where the increased concentration of cholesterol in the blood that exceeds the normal value. Triglycerides are formed by the body in the liver from glycerol and fats from food or excess calories by eating excessive. Increased triglycerides in the blood will cause hypertriglyceridemia. Petiveria alliacea included into the Phytolaceae family and in Indonesia known as singawalang. The extracts of the singawalang leaves are known containing flavonoid compounds, benzyl-2-hydroxyethylsulfide, isoarborinol, isoarborinol acetate, isoarborinol cinnamate, senfol, tannin, and polyphenols. Tannin content in singawalang is expected to provide a hypoglycemic effect because it can inhibit glucose absorption in the guts and flavonoids have antioxidant effects that can protect the body from free radicals.

Methods: This study used laboratory experimental method pretest-posttest control group design. The variables in this study using a dose of extract of singawalang leaves, triglyceride levels of white rats before and after an administration of leaf extract of singawalang, white male rats, the type of foods and drinks, the blood taken from the heart, the equipments and procedures used.

Result: The results of one way ANOVA test showed no significant result > 0.05 in post-test group, which meant that it gained no significant difference in triglyceride levels.

Conclusion: The administration of leaf extract of Singawalang at a dose of 90 mg/kgBB and 180 mg/kgBB did not lower triglyceride levels, whereas a dose of 360 mg/kgBB can lower triglyceride levels. The administration of leaf extract of Singawalang cannot have a significant influence in the post-test group that is not gained significant differences on the level of triglyceride between negative control group and the treatment in the One Way ANOVA test.

Keywords: Leaf extract of Singawalang (Petiveria Alliaceae), triglyceride level, white male rats (Rattus norvegicus L.), hypercholesterolemia woof, hypercholesterolemia, dosage, blood, flavonoids, One Way ANOVA test.