

ABSTRACT

The Effect of Ethyl Acetate Extract of Gambir (*Uncaria gambir*) on Total Blood Cholesterol Level of *Rattus norvegicus* Hypercholesterolemia

Background: Dyslipidemia is a metabolic disorder that characterized by an increase in total cholesterol level, serum LDL level and triglycerides level above normal also by decrease in serum HDL level. Hypercholesterolemia is a major risk factor for the development of premature atherosclerosis and cardiovascular disease complications. Drugs used to reduce cholesterol such as statin have side effects especially in long term usage. According to that condition, alternative medicine is required to prevent and treat dyslipidemia. Gambir (*Uncaria gambir*), a traditional plant originally from Indonesia contains catechin (flavonoid) that has potential to be developed into hypolipidemic drugs.

Aim: to evaluate cholesterol-reducing effect of ethyl acetate extract of gambir (*Uncaria gambir*) towards total blood cholesterol levels of white rats treated with high fat diet.

Method: This research was using randomized posttest only control group design. Five groups of rats were used in this research, with total of 25 rats (each group consist of 5 rats). Subjects were male rats, 2 months old, fed by high fat diet for 28 days except for Ko. K1 were given CMC Na 0,5%, K2, K3 and K4 groups were given gambir ethyl acetate extract at dose levels of 50, 100, and 200 mg/kg bb/day for 28 days.

Result: The results showed when compared to negative control, dose I reduced total cholesterol level significantly ($p < 0.05$). Dose II reduced total cholesterol level significantly ($p < 0,05$), whereas dose III reduced total cholesterol level insignificantly ($p > 0,05$).

Conclusion: Ethyl acetate extract of gambir at 50 and 100 mg/kg bb dose had antihypercholesterolemic effect

Keywords: Ethyl acetate extract; *Uncaria gambir*; Antihypercholesterolemic.