

ABSTRACT

Effects of Quercetin Administration on Liver Histology in High Fat Diet NAFLD Mice

Devita Ardina Prameswari

Liver is one of the most vital organs that functions as a center for metabolism. One of the diseases that disrupt liver function with a high prevalence is NAFLD (Non-Alcoholic Fatty Liver Disease). NAFLD is characterized by the presences of hepatocyte lipid accumulation, lobular inflammation and ballooning degeneration. Quercetin is reported to have hepatoprotective effects and has been widely used to treat the metabolic syndrome associated with NAFLD. Based on several previous studies, quercetin may be useful for the treatment of NAFLD by targeting various pathways in the development of NAFLD. The aim of this study is to determine the effect of quercetin on liver histology of mice with high fat diet-induced NAFLD. The study divided animals into seven groups as normal feed; high fat diet (HFD); HFD and Quercetin 50 mg/kgBW for 28 days i.p ; HFD and Quercetin 100 mg/kgBW for 28 days i.p ; HFD and Quercetin 50 mg/kgBW for 14 days i.p ; HFD and Quercetin 100 mg/kgBW for 14 days i.p HFD and HFD and repaired – feed. Based on the results of the study, it can be concluded that quercetin can improve mice liver histology.

Keywords: non alcoholic fatty liver disease, NAFLD, quercetin, high fat diet, liver histology, NAS