

EFFECT OF CARROT (*Daucus carota L.*) EXTRACT

AS A PEPTIC ULCER PREVENTION

ON PIROXICAM INDUCED MICE

Abstract

Non-Steroidal Anti-Inflammatory Drug (NSAID) contributes a lot to gastrointestinal morbidity due to the complications, one of which is peptic ulcer. Gastric mucosal damage is caused by inhibition of PGE₂ and PGI₂ secretion, local irritation, neutrophil adhesion, and increased HCl secretion. This experiment proves the effect of carrot (*Daucus carota L.*) extract as a peptic ulcer prevention on piroxicam induced mice.

This is an experimental research using posttest only control group design. Thirty five mice were divided into 5 groups and adapted for 1 week. Negative control group was given 0,25 ml aquadest, positive control group was given 0,104 mg famotidine, group A was given 200 mg/kgBW carrot extract, group B was given 300 mg/kgBW carrot extract, and group C was given 400 mg/kgBW carrot extract. Two hours later, mice were induced by 0,052 mg piroxicam. Treatments were given for 14 days. On the 15th day, mice' stomachs were taken and fixed. After that, the histopathological preparations were made.

Results of the mucosal thickness using ANOVA method showed $p = 0,000$ which means there were significant differences between groups ($p < 0,05$). On the other hand, the results of the histopathological signs of inflammation using Kruskal-Wallis method showed $p = 0,000$ indicating that there were an effect of the independent variable on its histopathology ($p < 0,05$). In conclusion, this experiment confirms that carrot (*Daucus carota L.*) extract is more effective in avoiding peptic ulcer due to NSAID consumption.

Keywords : *Daucus carota L.*, carrot, famotidine, piroxicam, peptic ulcer.