

CHAYOTE EXTRACT (*Sechium edule Jacq. Swartz*) ON ASPIRIN-INDUCED GASTRITIS MODEL CHANGES IN STOMACH HISTOPATOLOGY OF RATS

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ABSTRACT

Background: Gastritis is an inflammatory process of the gastric mucosa and submucosa or health problems caused by irritants and infections. This inflammation causes white blood cells to go to the stomach wall in response to abnormalities in that part. Chayote (*Sechium edule Jacq. Swartz.*) contains flavonoid compounds that have potential anti-inflammatory effects in aspirin-induced gastritis rats models. This study aimed to determine the effect of chayote extract (*Sechium Edule Jacq. Swartz*) on aspirin-induced gastritis model changes in stomach histopathology of rats.

Method: A quasi-laboratory experimental design in rats models of aspirin-induced gastritis. Each group was completed into 5 male rats and the number of treatment groups was 7 groups. Group K(-) is the negative control (normal) without any treatment, group K(+) is the positive control induced by Aspirin 200mg/kgBB, group 1 (P1) is the treatment group which is induced by Aspirin 200mg/kgBB with chayote ethanol extract 100 mg/kgBB, p.o, group 2 (P2) was the treatment group induced by aspirin chayote 100 mg/kgBB, p.o, group 4 (P4) was the treatment group induced by Aspirin 200mg/kgBB with the ethylacetate fraction of chayote 200 mg/kgBB, p.o and group 5 (P5) was the treatment group induced by Aspirin 200mg/kgBB with omeprazole 20 mg. The independent variable was ethanol extract and ethyl acetate fraction of *Sechium edule Jacq. Swartz*. The dependent variable is gastric histopathology. Rats blood serum Mean differences in groups were tested by One Way Anova.

Results: Inflammatory infiltration on gastric histopathology in groups P1, P2, P3, and P4 was less than groups P (5) and K (+). The acinar glands on gastric histopathology in P2 group was better than groups K (+), P2, P3, P4 and P5.

Conclusion: Ethanol extract of chayote 200 mg/KgBW anti-inflammatory is effective in reducing inflammatory infiltration and improving histopathological appearance of the rats stomach compared to the ethanol extract of chayote 100 mg/kgBW, the ethyl acetate fraction of chayote 100 mg/KgBW and 200mg/KgBW and omeprazole 20mg.

Keywords: *Sechium edule jacq. swartz*, gastritis, aspirin, rats.

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