

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 sub-mucosa 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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