

ULCER-HEALING ACTIVITY OF *ARCHACHATINA MARGINATA* MUCIN ON INDOMETHACIN-INDUCED GASTRIC ULCERATION IN ALBINO RATS

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ABSTRACT

The objective of this study was to evaluate the ulcer healing activity of *Archachatina marginata* mucin on indomethacin-induced gastric ulceration in albino rats. **Methods:** Thirty (30) adult male albino rats were divided into six groups of five rats each. Group, I was the normal control and was administered with 2ml/kg b.w distilled water. Group II was induced with 120mg/kg b.w indomethacin only. Groups III, IV and V were induced and treated with 200, 400 and 800mg/kg b.w mucin respectively while group VI was induced and treated with 20mg/kg b.w omeprazole. Treatment lasted for 10days after which animals were sacrificed by cervical dislocation. Harvested stomach tissue and gastric juice were processed and analyzed using standard methods. **Result:** Oral administration of indomethacin caused ulceration at the glandular region of rat stomach indicated by a high ulcer index (6.28 ± 0.33). However, this was low in group V administered with 800mg/kg mucin (1.52 ± 0.29). A similar value was recorded for the omeprazole treated group (1.24 ± 0.25). Gastric mucus was reduced in the stomach tissue of rats in group II (0.22 ± 0.05 abs/g of tissue). However, contrary values were recorded for other groups. This was obvious in groups V and VI (0.5 ± 0.08 abs/g of tissue) and (0.53 ± 0.07 abs/g of tissue) respectively. Free acidity and total acidity were significantly higher in group II (63.40 ± 7.66 mEq/L) and (91.40 ± 6.34 mEq/L) respectively. However, the reduction in free acidity and total acidity was observed in the group treated with 800mg/kg b.w mucin (47.40 ± 7.19 mEq/L) and (71.00 ± 7.00 mEq/L) respectively. A similar observation was made on the omeprazole treated group (34.00 ± 5.40 mEq/L) and (54.80 ± 5.35 mEq/L) respectively. **Conclusion:** By the outcome of this study, It can be deduced that mucin from *A. marginata* possesses appreciable ulcer healing potential