

STEM BARK EXTRACT OF *FICUS PLATYPHYLLA* (GAMJI) MAY BE EFFECTIVE IN PEPTIC ULCER DISEASE MANAGEMENT: AN *IN VIVO* ANIMAL STUDY

¹Chinenye J. Ugwah-Oguejiofor, ²Gift C. Pender, ¹Rufa'i Mubarak, ¹Yahaya Shehu, ³Salisu Buhari

¹Department of Pharmacology and Toxicology, Faculty of Pharmaceutical Sciences, Usmanu Danfodiyo University, Sokoto, Nigeria

²Department of Pharmacology and Toxicology, School of Medicine and Health Sciences, University of Rwanda, P. O. Box 4285, Kigali, Rwanda

³Department of Veterinary Surgery and Radiology, Faculty of Veterinary Medicine, Usmanu Danfodiyo University, Sokoto, Nigeria

Corresponding author's email: nenye789@yahoo.com

Background: *Ficus platyphylla* Del. Holl (Moraceae), is a deciduous plant mostly seen in savannah regions of the West African coast and used traditionally to treat ulcers, malaria, psychosis and infertility.

Objectives: Our study assessed the antiulcer activity of aqueous stem bark extract of *Ficus platyphylla* in Wistar rats.

Materials and methods: Four models namely, the indomethacin-induced, ethanol-induced, acetic acid-ulcer healing and pylorus ligation models were employed to assess the antiulcer activity of the aqueous stem bark extract of *Ficus platyphylla* (125, 250 and 500 mg/kg, p.o.) in rats. Ulcer-preventing effects were assessed through ethanol-induced and indomethacin-induced ulcer models, while the ulcer-healing effect was assessed through acetic acid-induced ulcer models. The pylorus-ligation ulcer model was used to assess the inhibitory effect of the extract on gastric acid secretion, pH and acidity.

Results: The mean ulcer indices at all doses (125, 250 and 500 mg/kg) of the extract in the indomethacin-induced model were significantly ($p < 0.05$) reduced while in the ethanol-induced ulcer model, the reduction in mean ulcer-index was at 250 and 500 mg/kg. In the acetic acid model, the extract showed a healing effect as there was a significant decrease in mean ulcer indices at all doses of the extract. In the pylorus ligation model the extract showed a significant reduction ($p < 0.05$; $p < 0.001$; $p < 0.0001$) in gastric volume at all doses, a significant ($p < 0.05$; $p < 0.001$) increase in gastric pH at 250 and 500 mg/kg and significant ($p < 0.001$) decrease in acidity at 250 and 500 mg/kg compared to control.

Conclusion: Our findings revealed that the aqueous extract of the stem bark of *Ficus platyphylla* possesses ulcer-preventing and healing activities and, hence, could be beneficial in the management of peptic ulcers.

Keywords: Antiulcer activity, *Ficus platyphylla*, Wistar rats, Omeprazole

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