

**ABSTRACT****The Effect of Inhibition 5-HT<sub>3</sub> Receptor on Protection  
Gastric Mucous by Fluvoxamine in Animals with Stress-  
Induced Gastric Ulcers**

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Gastric ulcer is a damage in the gastric mucosa that extends to the submucosa or muscularis propria which appears as a ulcer. One of the causes of this condition which has widely reported is stress. This study aims to determine and analyze the effect ondansetron in influencing the protection of the gastric mucous by giving fluvoxamine to the mice before being induced with stress. The result was then observed through the ulcer index parameter and intraluminal bleeding. Mice were divided into seven groups. Twenty-four hours before giving the treatment, the mice were fasted from food but free to drink. The induction method used is water immersion restraint stress (WIRS) for 6 hours. Single drug (monotherapy) and in combination drugs are given to the mice, ondansetron 3 mg/kg given intraperitoneally at 60 minutes and fluvoxamine 50 mg/kg, 100 mg/kg orally at 30 minutes before stress induction. The results showed the presence of ulcers in the stress-induced versus the control group ( $p < 0.0001$ ). The monotherapy administration with fluvoxamine 50 mg/kg, fluvoxamine 100 mg/kg, and ondansetron showed a significant reduction in ulcers with  $p < 0.005$ ,  $p < 0.0001$ , and  $p < 0.05$ . Meanwhile, drug combination showed that there was a reduction in ulcers but not significant than the fluvoxamine monotherapy. The findings showed that administration of fluvoxamine 50 mg/kg, fluvoxamine 100 mg/kg, and ondansetron 3 mg/kg monotherapy before stress induction could reduce the occurrence of gastric ulcers. In contrast, drugs combination did not increase the potential in protecting the mice's gastric mucous by fluvoxamine in stress-induced gastric ulcers.

**Keywords :** Gastric ulcer, Stres, Fluvoxamine, Ondansetron