ABSTRACT

Gastroprotective Effect of Fluvoxamine in Gastric Ulcer Induced by Stress and NSAID

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Gastric ulcer is a localized area of destruction on mucosal gastric resulted by necrotic mucosa and appears as erosion or ulcer. Many antidepressant drugs have shown antiulcer activity in various ulcer models by enhancing antioxidant and decreasing oxidant parameter, experimentally. The aim of this study was to investigate the gastroprotective effect of fluvoxamine in gastric ulcer induced by stress and NSAID. Mechanism underlying this effect was evaluated by assessing stress oxidative marker, malondialdehyde (MDA).

This study showed that fluvoxamine had gastroprotective effect in gastric ulcer induced by stress and NSAID. Fluvoxamine dose 100 mg/kg significantly decreased ulcer index in gastric ulcer induced by stress (p = 0.0090) and gastric ulcer induced by NSAID (p = 0.0443). It also decreased intraluminal bleeding in gastric ulcer induced by stress (p = 0.0243). While fluvoxamine 50 mg/kg significantly decreased ulcer index in gastric ulcer induced by stress only (p = 0.0449) and had small effect on intraluminal bleeding. However, fluvoxamine did not decrease malondialdehyde (MDA) level in gastric tissue.

Keywords: gastric ulcer, stress, NSAID, MDA, fluvoxamine, index ulcer, intraluminal bleeding