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RESEARCHARTICLE

Effect of *Portulaca oleracea* Fixed oil on Experimental Esophagitis in Albino Wistar Rats

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Abstract

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GERD is a very common and spectrum disease that is mainly caused by esophagitis. GERD is also known gastric reflux or acid reflux disease which is caused by mucosal damage when the lower esophageal sphincter (LES) open spontaneously for varying period of time or does not close properly, then stomach contents & acid coming up from the stomach to esophagus. Researchers reported that about 7% of people in the United States have erosive esophagitis. It was reported that ALA as a dual inhibitor of arachidonic acid metabolism i.e. inhibits both the cyclooxygenase and lipoxygenase pathway. ALA is chemically omega-3 fatty acids. The fixed oil obtained from *L. usitatissimum* and *O. sanctum* contains ALA (18:3, n-3), 57.38% and 16.63%, respectively. *Portulaca oleracea* also known as purslane contain omega 3 fatty acid. Our results suggested that this omega 3 fatty acid had inhibitory effects on reflux esophagitis and gastritis in rats. The present study enumerates the effect of *Portulaca oleracea* seed oil show histamine antagonistic, antisecretory (anticholinergic) and antioxidant activity of the oil was attributed for its effect in reflux esophagitis. The intraperitoneal administration of *Portulaca oleracea* fixed oil significantly decreased the gross volume of gastric juice, total acidity, esophagitis index and raised the gastric pH in comparison to toxic control.

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