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Gastroprotective activity of patoladi decoction in rats

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Abstract

In one of the Ayurvedic treatise 'Patoladi' decoction (PD) consisting of five ingredients (Terminalia chebula Retz, Terminalia belerica Roxb, Phyllenthus emblica Linn. Tricosenthes cucumarina Linn. Azadirachta indica A. Juss.) is recommended for the treatment of 'Amlapitta' (dyspepsia/gastritis). This indicates that PD may posses gastro protective action. The aim of this study was to investigate this possibility in rats using ethanol-induced gastric lesions. Different concentrations of freshly prepared PD was either orally [30% (n=6), 15% (n=6), 7.5% (n=6) or 0% (n=6)] or IP [30% (n=6), 7.5% (n=6) or 0% (n=6)] administered to fasted rats. 30 min later, 1 ml of absolute ethanol was either orally or IP administered to these rats and 1h later the number and length of gastric linear haemorrhagic lesions were determined. The results show that both treatments of PD markedly and significantly impaired the number and the length of gastric lesions. The PD did not significantly alter the volume, pH, free and total acidity and peptic activity of the gastric content. But, it caused significant increase in carbohydrate and mucus content of the gastric mucus layer. This may be the main mechanism of action of PD. We conclude that PD has potent gastroprotective action and may be therapeutically useful in the treatment of 'Amlapitta' in Ayurvedic Medicine in Sri Lanka.

Keywords: Patoladi decoction, dyspepsia, gastritis, gastric lesion, gastroprotection, Ayurveda, Sri Lanka

1. Introduction

In an ancient Indian Ayurvedic authentic treatise 'Patoladi' decoction (PD) is recommended for the treatment of 'Amlapitta' (dyspepsia/gastritis) (1). This indicates that PD may have gastroprotective action. This decoction contains five ingredients (pericarp of dry fruits of *Terminalia chebula Retz*.