

Effects of Gum acacia aqueous extract on the histology of the intestine and enzymes of both the intestine and the pancreas of albino rats treated with Meloxicam

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ABSTRACT

Background Non-steroidal anti-inflammatory drugs (NSAIDs) cause gastrointestinal damage both in the upper and lower gastrointestinal tract, in addition to their undesirable side effects on the pancreas. Meloxicam like all NSAIDs has damaging effects on the gastrointestinal tract including perforations, ulcers and bleeding. **Objective** The present work describes the effects of Gum acacia aqueous extract on the histology of intestine and enzymes of both intestine and Pancreas of albino rats treated with Meloxicam. **Materials and Methods** This study was performed on four groups of equally weighed male rats, each group included ten animals; the first group was received a diet containing 0.2 mg/kg bw meloxicam per day; the second was given 1gm Gum acacia per day in its diet; the third was given meloxicam followed by gum in the same doses per day; while the fourth group (control rats) was placed on a normal diet and water. All rats were received their diet for a period of 21 days. **Results** A considerable protective effect of Gum acacia aqueous extract on the histology of intestine of albino rats treated with meloxicam was recorded. In addition, the study displayed a significant increase ($P < 0.001$) in the intestinal enzymes; lipase, amylase, alkaline phosphatase (ALP) and lactate dehydrogenase (LDH) in the 1st and 3rd groups animals while these enzymes were significantly decreased ($P < 0.001$) in the 2nd group when compared with the 4th control group. **Conclusion** This study concluded that Gum acacia provides a protection and defense against the harmful effects of meloxicam therapy used as one of the novel anti-Cox-1 and Cox-2 NSAIDs.

KEYWORDS

Gum acacia . ileum . lipase . meloxicam . NSAID drugs

REFERENCES