Histological evaluation of Curcuma longa and ghee on experimental gastric mucosal ulcers healing in rats.

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Abstract:
Objectives: The non-steroidal anti-inflammatory drugs, often leads to gastric ulceration and delayed healing. This study is to evaluate the therapeutic effect of a mixture of Curcuma longa rhizomes powder and ghee on experimental gastric ulcers in rats.
Methods: Food deprived male rats (250-300 gr) 48 h before gastric ulcer induction by oral administration of indomethacin (50 mg/kg) suspended in 1% Carboxymethyl cellulose, were used. The normal and untreated (indomethacin) groups just received normal saline. The treatment groups received different doses of Curcuma longa and ghee (500 and 750 mg Curcuma longa in 10 cc ghee/ kg) for three successive days. On the third day, the rats were sacrificed. The stomach was removed for histological studies. The number and length of ulcers measured and the ulcer index was calculated.
Results: The mixture of Curcuma longa and ghee significantly decreased gastric ulcer index, inflammatory cells and blood capillaries densities (p<0.001) compared to indomethacin group. Thickness of mucosal layer (p<0.001) and secreted mucus (p<0.05) increased too.
Conclusion The mixture of Curcuma longa and ghee significantly improved gastric ulcers, and accelerated healing.

Keywords: Curcuma longa, Ghee, Gastric ulcer, Healing.