

Role of Chinese herbal medicines in a rat model of chronic colitis

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Abstract

AIM: To investigate a mixture of traditional Chinese medicine (TCM) in the prevention of chronic colitis in rats.

METHODS: Sixty rats were divided into 3 groups. Colitis was induced by trinitrobenzene-sulfonic acid (TNB). On day 10, all the survived rats were killed, the mortality and intestinal obstruction

rate were calculated, the colonic lesion score was assessed and collagenase activity and collagen concentration were measured.

RESULTS: The survival rate was much lower and intestinal obstruction rate much higher in TNB than those in TCM, they were 53% and 81% vs 80% and 24% ($P < 0.05$ and $P < 0.01$, respectively). There were also significant differences in colonic stricture score and colonic weight between TNB and TCM groups (1.75 ± 1.2 vs 0.22 ± 0.67 and 0.57 ± 0.36 vs 0.31 ± 0.10 , $P < 0.01$ and $P < 0.05$, respectively). No hydroxyproline and collagenase activity differences were found between the two groups.

CONCLUSION: This mixture of TCM prevents the formation of intestinal stricture, increases the survival rate and decreases intestinal obstruction rate in a rat model of chronic colitis.

Key words: Trinitrobenzenesulfonic; Colitis/drug therapy (TCD); Rats; drugs, Chinese herbal; Blood stasis removing drugs; Models

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