

Effect of herbs-partition moxibustion on IL-1 β and TNF- α in UC rats

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Abstract

AIM: To observe the effect of herbs-partition moxibustion on IL-1 β and TNF- α in UC rats.

METHODS: The animal models were created by immunological method. They were divided into 5 groups at random, after treated by different methods, IL-1 β and TNF- α in colon tissue of UC rats were detected with immunologic technique.

RESULTS: In control group, there was a little or no IL-1 β positive cell in colon mucosa. Compared with that in rats of control group, the number of IL-1 positive cell in model group was much larger, and IL-1 β cells with brown granules were mainly expressed in cytoplasm of macrophage in lamina propria of colon. Compared with model group, IL-1 β positive cells in mild moxibustion group markedly

decreased ($P < 0.05$), and those in electro acupuncture group and herbs partition moxibustion group decreased even more markedly ($P < 0.01$). The difference between the last two groups is evident ($P < 0.05$). TNF- α positive cells are not or seldomly found in UC rats, but in model group, these cells increased evidently, which were mainly the macrophages in lamina propria of colon. Compared with those in model group, the positive cells decreased markedly in electro acupuncture group ($P < 0.05$), and decreased more markedly in mild moxibustion group and in herbs-partition moxibustion group ($P < 0.01$). There were statistically significant differences between herbs-partition moxibustion group and electro acupuncture group ($P < 0.05$).

CONCLUSION: The mechanism of acupuncture and moxibustion may be that inhibited macrophage activation, reduced expression of IL-1 β and TNF- α and thereby blocking their further activation and then controlled, the initiated inflammation and its immunity cascade reaction and resulted in restoring the normal immunity function and benefited in healing of ulcer.

Key words: Ulcerative colitis; Interleukin-1; Immunohistochemistry; Acupuncture-moxibustion; Macrophage-activating factors; Tumor necrosis factor; Rats

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