

Antiinflammatory Effects of Bu Zhong Yi Qi Tang in Patients with Perennial Allergic Rhinitis

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Abstract:

Bu Zhong Yi Qi Tang, an ancient formula of Chinese medicine usually used in the treatment of allergic diseases, was evaluated in the treatment of patients with perennial allergic rhinitis.

In this study, 60 patients allergic to house dust mite allergen confirmed by skin test and MAST test were recruited and randomized. An experimental group of 36 patients was treated with Bu Zhong Yi Qi Tang, whereas a control group of 24 patients was treated with a non-effective formula Ping-wei-san for 3 months.

The nasal symptomatic scores and the responses of polymorphonuclear neutrophils (PMN) to IL-4-stimulation were measured after treatment. The nasal symptomatic scores in the experimental group were significantly improved (3.78 ± 0.09 before treatment vs. 0.57 ± 0.06 after treatment). In contrast, no change was found in symptomatic scores in the control group (3.17 ± 0.12 before treatment vs. 2.79 ± 0.14 after treatment). Moreover, total serum IgE and the IL-4-stimulated production of PGE₂ and LTC₄ by PMN was significantly suppressed in the experimental group after treatment compared to the control group. The COX-2mRNA expression in IL-4-stimulated PMN was also significantly suppressed after Bu Zhong Yi Qi Tang treatment.

These results suggest that Bu Zhong Yi Qi Tang but not Ping Wei San was beneficial to the patients with perennial allergic rhinitis via suppressed nasal inflammation by an antiinflammatory effect.