

Clinical Research Review of Acupuncture for Laryngopharyngeal Reflux Disease

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Abstract: In recent years, laryngopharyngeal reflux disease has attracted the attention of acupuncture clinicians. This article summarizes the acupuncture treatments (simple acupuncture, acupuncture combined with western medicine, acupoint application combined with Chinese medicine) and the corresponding treatment effects in the past 5 years. The current research has proved the effectiveness of acupuncture and moxibustion for laryngopharyngeal reflux disease, and provides methods and ideas for clinical treatment of laryngopharyngeal reflux disease.

Keywords: Laryngopharyngeal Reflux Disease; Acupuncture; Clinical Research Review

Introduction

Symptoms of laryngopharyngeal reflux disease (LPRD) include throat swelling, repeated throat clearing, hoarseness, dysphonia, and chronic cough^[1]. Epidemiological reports in recent years show that the prevalence of LPRD in the United Kingdom, Greece, and Fuzhou, China is 34.4%, 18.8%, and 5.0%, respectively ^[2-4], and it has caused a relatively serious social medical and economic burden. In the past few years, laryngopharyngeal reflux disease has increasingly attracted the attention of clinicians. This review summarizes the clinical acupuncture and moxibustion treatment of LPRD in the past five years.

1. Pure acupuncture

Yang Xiaowei believes that LPRD patients often suffer from stagnation of liver qi due to the prolonged and repeated course of the disease. The treatment group was treated with pure acupuncture, while the control group was treated with esomeprazole for 4 weeks. The results showed that the RSI score of the observation group was significantly lower than that of the control group, $p < 0.05$, and the difference was statistically significant, indicating that soothing liver and stomach acupuncture can improve the symptoms ^[5]. Zhang Tao administered acupuncture at a single point of Tiantu to 105 patients with LPRD, and evaluated the curative effect through a scoring scale combined with laryngoscopy. It was found that after acupuncture at this point, the RSI and RFS scores were both lower than those before treatment, and the difference was statistically significant ($P < 0.05$), indicating that acupuncture at Tiantu acupoint is effective for reflux pharyngitis^[6], and it is speculated that it may be related to the location of the occurrence of laryngopharyngeal reflux.

2. Acupuncture combined with Western medicine

Wang Yingying believed that the disorder of Qi movement was the main cause of reflux pharyngitis, and selected acupuncture points and oral western medicine accordingly, and the control group was only given western medicine. It was found that the evaluation indexes of the observation group were lower than those of the control group after treatment ($p < 0.05$). The total effective rate in the observation group was 92.9%, which was better than 71.4% in the control group. It shows that acupuncture combined with western medicine can effectively control the symptoms of reflux based on the principle of Qi machine ascending and descending theory, and the curative effect is better than that of western medicine alone ^[7]. Zhang Tao et al. randomly divided 202 LPRD patients who met the inclusion and exclusion criteria into a treatment group

of 102 and a control group of 100. The treatment group was given PPI combined with acupuncture at Tiantu point, while the control group was given PPI only. The clinical symptom scores of the two groups were observed. As a result, there were statistically significant differences in the total effective rate and symptom and sign scores between the two groups, indicating that acupuncture at Tiantu point combined with PPI is effective in the treatment of LPRD^[8]. The clinical efficacy of acupuncture and western medicine in the treatment of reflux pharyngitis is definite, which may be related to the improvement of esophageal motility and EGF level by acupuncture^[9].

3. Acupoint sticking combined with traditional Chinese medicine

Liao Weiting used acupoint sticking combined with Shugan Jianpi Liyan Decoction to treat patients with reflux pharyngitis and observed the clinical efficacy. In the traditional Chinese medicine group, the observation results showed that there were statistically significant differences in the scores of symptoms and signs and adverse reaction rates between the two groups before and after treatment ($P < 0.05$), indicating that acupoint sticking combined with Shugan Jianpi Liyan Decoction can not only effectively improve reflux pharyngitis Symptoms and signs of patients, but also with high safety^[10]. Wu Yichao used acupoint sticking combined with traditional Chinese medicine to treat reflux pharyngitis with liver stagnation and spleen deficiency. The research group applied Chenshu Jianpi ointment on Ganshu, Neiguan, Zhongwan and other points, combined with oral Chinese medicine Chaihu Shugan Powder. The control group received omeprazole and mosapride. The results of the study showed that the RSI and RFS scores of the patients in the study group were significantly lower than those in the control group, and the difference was statistically significant ($P < 0.05$)^[11]. However, it is worth thinking about how the above research determines that acupoint sticking therapy is effective.

4. Outlook

In recent years, scholars at home and abroad have been hot on the pathogenesis of LPRD^[12-15]. Wang Gang et al. found that patients with LPRD mainly have autonomic dysfunction characterized by relatively decreased vagal nerve activity and relatively increased sympathetic nerve activity, and vagal nerve activity in LPRD patients is negatively correlated with the severity of reflux symptoms and signs^[16]. Numerous studies have shown that acupuncture can modulate vagal activity^[17-18]. Modern medicine believes that acupuncture at corresponding acupoints (such as Zusanli, etc.) can enhance gastrointestinal function by regulating the excitability of the vagus nerve and inhibiting gastric acid secretion. However, Chinese traditional medicine believes that if the acquired essence is strong, the middle jiao will rise and fall spontaneously, and all reflux symptoms (acid reflux, belching, etc.) will be eliminated. Laryngeal reflux disease is inextricably linked with gastroesophageal reflux disease in a strict sense, and throat reflux disease is actually a special type of reflux disease. As far as this disease is concerned, whether further research can find specific acupoints or acupoint groups that have a certain neural pathway connection with the vagus nerve in this segment, and relatively increase the activity of the vagus nerve through acupuncture intervention, so as to reduce the symptoms of laryngopharyngeal reflux and reduce the symptoms of laryngopharyngeal reflux. Signs? The concept of neuronal hypersensitivity^[19] suggests that targeting specific neuronal receptors in the peripheral and central nervous systems would be a very promising therapeutic direction. Similarly, can acupuncture stimulate certain receptors through the intervention of certain acupoints, thereby reducing the possibility of hypersensitivity? Relevant acupoint or meridian-specific studies are worthy of further exploration. Due to the lack of effective treatment measures for LPRD in Western medicine at present^[20], the solution of the above problems may change the treatment pattern of LPRD.

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