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Research Progress of Houttuynia Cordata in Oral Cavity

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Abstract

The traditional Chinese medicine Houttuynia cordata has functions such as promoting blood circulation and meridians, removing blood stasis and pain, clearing the heart and removing troubles. In clinical practice, many traditional Chinese medicine preparations containing Houttuynia cordata have been used for the treatment of oral mucosal diseases, orthodontic tooth reconstruction, and other treatments. This article conducts research and analysis on the chemical components of Houttuynia cordata and its treatment of various oral diseases, and summarizes the mechanism of action of its main chemical components, providing reference for the application of Houttuynia cordata in various oral diseases.

Keywords

Houttuynia cordata, Oral cavity.

1. INTRODUCTION

Houttuynia cordata, recognized by the Ministry of Health as both a food and a medicine, has a long history of medicinal value. It can not only clear heat and detoxify, but also eliminate carbuncle and pus, and can also diuretic and drenching. It is a dual-use plant for medicine and food. Modern medical research shows that the flavonoids it contains not only have anti-inflammatory and antibacterial effects, but also have immune regulation, antiviral and anti-tumor effects. The Houttuynia cordata extract it contains can also regulate bone metabolism, inhibit bone resorption and osteoclast activity, and inhibit osteoblast apoptosis. At present, drugs based on Houttuynia cordata include granules, capsules, tablets, syrups, soft capsules, drop pills, eye drops, eye drops, and injections.

Houttuynia cordata, which is mentioned in many medical books in China, is a traditional Chinese medicine with dual functions of medicine and food, and has wide applications in the fields of food and medicine. Houttuynia cordata is widely distributed in Asia. It has a long medicinal history in China and is generally effective in treating pneumonia and lung abscess. It plays a crucial role in traditional medical treatment and disease treatment. Houttuynia cordata contains various chemical components, including volatile oils, alkaloids, flavonoids, and phenolic acids. Flavonoids, saponins, polysaccharides, and alkaloids isolated from plants all exhibit effective anti-aging activity, and have great potential in the development of anti-aging products [1-2]. Its biological activity is very strong, and its mechanism of action is closely related to many cells and their cytokines [3]. In clinical practice, it can usually be combined with other drugs to treat dysentery, colds, fever, mumps, etc.

Ye Ya [4] studied the effectiveness of vitamin C combined with Houttuynia granules in the treatment of oral ulcers, and collected clinical data from 80 patients with oral ulcers. All patients were randomly divided into a reference group and given vitamin C treatment using a random number table method. The experimental group received vitamin C treatment in combination

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with Houttuynia cordata granules on the basis of the reference group, with 40 patients in each group. Compare the efficacy, clinical related indicators, syndrome scores, and incidence of adverse reactions between the two groups. The total effective rate of the experimental group was higher than that of the reference group, with shorter ulcer healing time and pain duration compared to the reference group. The pain score was lower than the reference group ($P<0.05$). After treatment, the scores of various syndromes in both groups were lower than before treatment, and the experimental group was lower than the reference group ($P<0.05$). There was no statistically significant difference in the incidence of adverse reactions between the two groups ($P>0.05$). Conclusion: The combination of vitamin C and Houttuynia cordata granules is effective in treating oral ulcers, beneficial for improving the efficacy and symptoms of patients, and has high safety. It is feasible to promote and apply.

Li Ran [5] et al. studied the clinical efficacy analysis of Houttuynia cordata combined with Kangfuxin liquid in the treatment of recurrent afluxia ulcers, and randomly divided 80 patients into 4 groups: Group A was the control group (20 cases); Group B was treated with Kangfuxin liquid (20 cases); Group C was treated with Houttuynia cordata (20 cases); Group D was treated with a combination of Houttuynia cordata and Kangfuxin liquid (20 cases). One week is a course of treatment, and the patient's ulcer recovery, improvement, and ineffectiveness were recorded on the 3rd and 5th days, respectively. The ulcer recurrence rate within 3 months was followed up and recorded, and the above recorded results were statistically analyzed. The results showed that there was a statistically significant difference in efficacy between the four groups 3 and 5 days after medication; The recurrence rate of oral ulcers after 3 months of medication was also statistically significant among the four groups, with a significant decrease in the recurrence rate in the combined medication group. Conclusion: The combination of Houttuynia cordata and Kangfuxin liquid has a good therapeutic effect on recurrent aphthous ulcer and reduces the recurrence rate.

Chen Hongmin [6] et al. divided 100 patients with nasopharyngeal carcinoma undergoing radiotherapy into two groups. The experimental group (50 people) used Houttuynia cordata to soak in water as tea every day from the week before radiotherapy; The control group (50 people) started gargling with physiological saline or Dobe's solution before radiotherapy, drinking regular water, and closely observing the condition of the oral and pharyngeal mucosa. The prevention effect of radiation induced oral ulcers in the experimental group was significantly better than that in the control group ($P<0.01$). Three cases in the experimental group were treated with antibiotics for anti-inflammatory, analgesic, and nebulized inhalation, and no case stopped radiation therapy and enteral and parenteral nutrition therapy. 35 cases in the control group were treated with antibiotics for anti-inflammatory pain relief and nebulized inhalation, while 20 cases were treated with cessation of radiation therapy and enteral and enteral fluid supplementation. Conclusion: Starting one week before radiotherapy, using Houttuynia cordata as a daily tea can effectively reduce the occurrence of radiation induced oral ulcers in nasopharyngeal carcinoma. This method is simple, convenient, economical, and effective, and is worth promoting in clinical practice.In a study conducted by Retinakrim et al., 64 patients with recurrent oral ulcers were treated with decoction of Houttuynia cordata. The total effective rate after treatment with Houttuynia cordata was 79 69% and low recurrence rate Conclusion: Houttuynia cordata has a significant therapeutic effect on recurrent oral ulcers while reducing the recurrence rate.

2. CONCLUSION

In recent years, many therapeutic drugs related to Houttuynia cordata have been developed. Overall, Houttuynia cordata has a wide range of applications in oral diseases. From the perspective of chemical composition, there has been a lot of research on Houttuynia cordata,

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with clear mechanisms of action and extensive applications in the oral cavity. However, there is still great room for expansion in the research, related mechanisms, and specific applications of other chemical components in the oral field. This article provides a systematic summary of the application of Houttuynia cordata in dentistry over the past decade, and summarizes the targets and mechanisms of its main active ingredients, in order to provide a theoretical basis for the future development of dentistry.

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