

# Study on the Effect of Fuzi Rhubarb Xanxin Decoction Combined with Qinghua Decoction on Periodontitis

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**Abstract:** Many reasons may lead to the occurrence of periodontitis disease in the human body, especially the people who often get overheated. If they do not pay much attention to oral hygiene, and even like to eat some spicy and stimulating food, the probability of periodontitis will increase. Fuzi Rhubarb Xanxin decoction is a traditional Chinese medicine prescription, because the prescription is warm and dissipates cold, so it has the effect of relieving pain. In the treatment of patients with periodontitis, the application of Fuzi Rhubarb Xanxin decoction can improve the disease through recuperation. Qinghua decoction mainly had clear heat, detoxification, analgesic effect, so as to improve the effect of the further consolidated. In this paper, the causes of periodontitis and the application of Fuzi Rhubarb Xasimin decoction were analyzed to explore the role of Fuzi Rhubarb Xasimin decoction in the treatment of periodontitis.

**Keywords:** Fuzi Rhubarb Xasimin Decoction; Qinghua Decoction; Periodontitis; Traditional Chinese Medicine Treatment

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## Introduction

Periodontitis is the main manifestation of tooth and gingiva pain. Mostly because of plain oral unclean or over eating paste liang thick taste, stomach fuzi accumulation heat, stomach fire on the flush, or wind fire evil poison invasion, injury and teeth, or kidney Yin loss, deficiency fire on the inflammation, burning gum caused. There are two reasons for the formation of periodontitis: (1) because of the fire, the Yangming Fu fire and the evil of wind and heat, wind and fire on the tooth pain. The cold and pain of the affected tooth should abate. Treatment should be thin wind, fire, detoxification. Add and subtract treatment with Qingwei powder, Yunvjian, etc. (2) Because of the cold, the evil guest of wind and cold in the tooth, tooth pain, tooth heat pain reduction. It should dissipate cold and relieve pain. Ephedra aconite asarum soup can be selected. Based on the application effect of Fuzi Rhubarb Xiixin decoction, the effect of treating periodontitis was analyzed.

## 1. Overview of periodontitis

### 1.1 Epidemiology

#### 1.1.1 Incidence

Periodontitis, also known as destructive periodontal disease, is a chronic inflammation caused by the invasion of periodontal tissue by bacteria in the patient's dental plaque. If not treated in time, periodontal support tissues such as cementum, alveolar bone, periodontal membrane and gingiva will be destroyed, forming a periodontal pocket, which is a small pocket formed by widening the gap between the tooth and gingiva, causing the tooth to lose adhesion and absorb alveolar bone. With the gradual aggravation of the patient's condition, it will cause the patient's teeth to loosen, make the gingival retreat and even lead to the loss of tooth function.

Periodontitis is a common oral disease in People's Daily life. According to the Fourth Chinese Oral Health Epidemiology Report published in 2017, the detection rate of deep periodontal pocket ( $\geq 24\text{mm}$ ) and attachment loss ( $\geq 24\text{mm}$ ) in 15-year-olds was 6.5% and 0.5%, respectively. The detection rate of gingival bleeding, deep periodontal pocket ( $\geq 26\text{mm}$ ) and attachment loss ( $\geq 24\text{mm}$ ) was 87.4%, 6.9% and 33.2% in 35-44 year olds. The detection rate of deep periodontal pocket ( $\geq 26\text{mm}$ ) and attachment loss ( $\geq 24\text{mm}$ ) was 15.1% and 69.9% in 55-64 year olds.

## **1.1.2 Incidence trend**

The prevalence of periodontitis increased with age. The prevalence of periodontitis increased significantly after 35 years of age, peaked at 50~60 years of age, and then decreased. With the strengthening of oral hygiene awareness, the prevalence of mild to moderate periodontitis will gradually decrease. Adults over 35 years old have a high incidence of periodontitis. The incidence of periodontitis is slightly higher in men than in women. Smokers have a higher incidence than non-smokers.

## **1.2 Disease Types**

### **1.2.1 Chronic periodontitis**

The most common type of periodontitis, which accounts for about 95% of all periodontitis patients, occurs most often in adults, but children may also be affected. This disease is often caused by the accumulation of dental plaque, the course of disease is slow and gradually aggravated, untreated may lead to gum and alveolar bone destruction and even tooth loss.

### **1.2.2 Invasive periodontitis**

It usually occurs in adolescents, and the destruction of periodontal support tissue is rapid and severe, with familial aggregation. If left untreated, it can lead to rapid tooth loss.

## **1.3 The cause**

### **1.3.1 Local factors**

Dental plaque, which is mainly composed of bacteria adhering to the tooth surface, intercellular material, exfoliated epithelial cells and food residues, is the most important local cause of periodontitis.

Calculus is calcified plaque and sediment deposited on the surface of teeth, which cannot be removed by brushing. The main damage to periodontal tissue of calculus comes from the accumulation of plaque on its surface. Calculus is an important factor in the development of periodontitis.

Traumatic occlusal injury occurs in periodontal tissue due to excessive bite force or abnormal direction, including early contact during occlusal, night molar, etc. As a synergistic factor in the destruction process, it can aggravate the progression of periodontitis.

Food impaction mainly refers to the insertion of food into the interdental space of two adjacent teeth. It is one of the common causes of local periodontal inflammation, and can also aggravate the existing pathological changes of periodontal tissue.

## **2. The effect of Fuzi Rhubarb xanxin decoction combined with Qinghua decoction on periodontitis**

### **2.1 Aconiti Rhubarb and Xasimin Decoction treatment plan**

Prescription: Aconite 15g, asarum 10g, Angelica dahurica 12g, Fangfeng 12g, rhubarb 4g, dried ginger 12g, processed licorice 15g. Fry ACONITE, dried GINGER and broiled Licorice for 40 minutes, then add the remaining herbs and cook for 40 minutes, open the lid and cook. Cook the second time for 50 minutes. Mix the juice between the two times and take it in five doses.

### **2.2 Qinghua decoction treatment plan**

Prescription of Qinghua Soup: 10 g of Beauveria bassiana, 6 g each of Cicada decidua, honeysuckle, Zeilan, Scutellaria baicalensis, 3 g each of Coptis coptidis, fried Gardenia jasminoides, forsythiae forsythiae, gentian, Radix scrophora, Platycodon grandiflorum, 2 g each of tangerine peel, and 1.5 g each of white aconite and licorice. After decocting to 300 mL in water, they were orally divided into 2 times, 1 dose per day. The time interval between the two doses was 0.5 h and lasted for 14 days.

### **2.3 Effect of Fuzi Rhubarb xanxin decoction combined with Qinghua decoction on periodontitis**

On the concept of TCM, tooth peri-arthritis and belongs to the "tooth non-traumatic" xuan "teeth" teeth "shake", etc., the original account in Huangdi Neijing, and points out that the main reason there are roughly several diet dishonor, spleen and stomach injuries, eagerness and hot fire. Eating for a long time thick taste, greasy food, alcohol, resulting in moist attack, the tooth bed is not clear, prone to inflammation. Kidney essence depletion, Yin deficiency fire flourishing. While the kidney is the main bone, the tooth is bone, kidney qi is missing, the tooth is dry. Qi and blood are not enough. Fine can not reach the gingiva, and cause the gingival flesh hypotrophic. According to this, in the clinical practice of traditional Chinese medicine often from tonifying kidney and consolidating qi, clearing heat and resolving table, to deal with periodontitis. The main ingredients of Aconite Rhubarb and asarum decoction consist of aconite, rhubarb and asarum, which can tonify kidney and warm Yang, dispel fire, clear heat and detoxify. Li Yang et al. used Rhubarb Fuzi Xianxin decoction to diagnose and treat patients with chronic renal failure, and believed that the renal function of patients was significantly enhanced after cure<sup>[1]</sup>. Qinghua Decoction is often used in the diagnosis and treatment of inflammatory diseases because of its functions of detoxification and fire removal, qi sterilization and so on. Yu Haiping et al. applied Qinghua decoction in the diagnosis and treatment of spleen deficiency and damp-heat syndrome, which proved that the content of inflammatory factors in patients was significantly reduced after cure, and the overall curative effect reached 94.29%<sup>[2]</sup>. Rhubarb asarum decoction combined with lateral root of aconite thanh hoa soup after treatment, the proof of aconite rhubarb soup with thanh hoa asarum soup for periodontitis has various function, can significantly improve symptoms, and illustrates the monkshood rhubarb soup with thanh hoa asarum soup treatment, the improvement of disease symptoms in patients with integral group effect is obvious, can significantly improve the periodontal status, control periodontal status improve higher than the control group, showed Aconite rhubarb Xasimfen decoction combined with Qinghua decoction can improve the periodontal status of patients especially obviously<sup>[3]</sup>. In addition, the study shows that the combination of Fuzi rhubarb xanxin decoction and Qinghua decoction has an obvious effect on relieving headache.

White batryticated silkworm functions of analgesia of thanh hoa soup cicada scattered in addition to the hot wind, honey dogwood antipyretic, evacuate blast temperature, the effect of promoting blood circulation to remove blood stasis, red ginger, purging fire down poison, dry radix scutellariae antipyretic, fry ginger Bang autumn zephyrlily ping lishi, soil forsythia antipyretic, anti-inflammatory, fights, radix geutianae flat autumn zephyrlily dry wet, figwort decrease internal heat, antipyretic, orange flower clear heat nourish, pain, will new dried tangerine or orange peel to fill gas, rhizoma typhonii analgesic antipyretic, gansu Grass heat-clearing and detoxification drugs, adjusting all drugs, the whole prescription played the Qingshu Jiebiao, heat dissipation and pain relief. Periodontitis with rhubarb asarum soup of lateral root in coordination with the Qinghua soup treatment, two kinds of liquid form together play a synergistic effect, the former mainly in kidney and explored ways to tooth peri-arthritis for curative effect, while the latter mainly had clear heat, detoxification, analgesic effect, so as to improve the effect of the further consolidated, and can make the tooth peri-arthritis patients symptoms fundamentally change, thereby reducing the Traditional Chinese medicine syndrome integral, and to the periodontal condition to be obviously improved, so that the patient's pain effectively alleviated.

## Conclusion

Fuzi Rhubarb xanxin decoction combined with Qinghua decoction has significant effect in the treatment of periodontitis, which can effectively improve the symptoms and periodontal status of patients, and reduce the pain score. Large sample data analysis, long-term follow-up, animal model construction and other studies need to be carried out in the subsequent work to further explore the clinical value of Fuzi rhubarb xanxin decoction combined with Qinghua decoction in the treatment of periodontitis.

## References

- [1] Li Y, Fu N, Zhang W, et al. Efficacy and safety of Rhubarb Fuzi Xiixin decoction combined with acupoint application in the treatment of chronic renal failure [J]. Journal of Integrated Traditional Chinese and Western Medicine, 2017, 26(20): 2230-2232.
- [2] Yu HP, Li CG. Clinical observation of Jianpiqinghua Decoction in the treatment of acute ulcerative colitis (spleen deficiency damp-heat syndrome) [J]. Chinese Medicine Emergency, 2018,27 (3) : 500-502.
- [3] Zhou F, Chen H, Zeng J. Observation of Fuzi Dahuang Xixin Tang Combined with Qinghua Tang for Periodontitis and Its Effect on Scores of Pain[J]. Journal of New Chinese Medicine, 2019,51(9):65-68.