Study on the Application of Chinese Patent Drug and Chinese Formula of Rabdosia Rubescens

Mengfan Peng, Baosong Liu and Mingsan Mao
Pharmacology, Henan University of Traditional Chinese Medicine, Zhengzhou, China
Email: pengmengfanfan@163.com, Liubaosong647@163.com, miaomingsan@163.com

Abstract. Rabdosia rubescens contains many active ingredients such as terpenoids, flavonoids, polysaccharides and organic acids. Modern research has proved that Rabdosia rubescens has the effect of heat-clearing and detoxicating, antibacterial and anticancer, promoting blood circulation to arrest pain and anti-tumor. It is used in the treatment of sore throat, rheumatoid arthritis and various kinds of cancer. The clinical application of Rabdosia rubescens is restricted in the fat-soluble components, and the solubility of water solubility is ignored. The application of prescriptions, Chinese patent drug and food therapy of Rabdosia rubescens are less and fragmented. This paper inquires relevant literature, the application of Rabdosia rubescens in prescription, Chinese patent medicine and food therapy was reviewed, in order to make Rabdosiae rubescens play a greater role in the relevant area. On the basis of make the best use of everything, to promote the innovation and development of Chinese medicine and services to the people in our country.

1. Introduction
Rabdosia rubescens is a kind of medicinal plant, tastes bitter and sweet, it is cold in nature. Belong to the liver, lung and stomach three channel tropism, It has the function of clearing away heat and toxic materials, antibacterial anti-inflammatory, promoting blood circulation to arrest pain and anti-tumor. Rabdosia rubescens is one of the most famous medicinal herbs in henan province, which is rich in the mountains of taihang mont, Originated from Herbal for Relief of Famines. The traditional Chinese medicine for treating esophageal cancer with Rabdosia rubescens is effective. In 1972, the esophageal cancer research center found that Rabdosia rubescens had a unique anticancer effect, which then has been widely used in clinical practice and has been praised by experts as the "king of Chinese medicine antibiotics". Rabdosia rubescens in these aspects of anti-cancer anticancer, antibacterial, anti-inflammatory, immunomodulatory and antioxidant have potential medicinal and economic benefits. In recent years, there have been many studies on the application of the single drug and its chemical constituents in Rabdosia rubescens, but there are relatively few references in the Chinese formula, Chinese patent medicine and food therapy of it. Although there is no shortage of literatures about the pharmacological action of it, there is hardly any literature on the pharmacological action of the corresponding chemical components of it. Therefore, this article summarized its pharmacological effects of corresponding chemical composition, formula, Chinese patent medicine application, to make the drug in the field of prevention and cure of disease get more attention.
2. The Pharmacological Action of Corresponding Chemical Components

2.1 The Pharmacological Effects of Terpenoids
Terpenoids have the highest content, high biological activity and rich medicinal value and economic value in Rabdosia rubescens. Previous studies have confirmed that dimethylin has the effects of anti-inflammatory, mediated immunity, antioxidant and antibacterial properties [1]. It was reported that dimethylin could inhibit the proliferation and induce apoptosis of colon cancer LoVo cells by inhibiting PGE2 synthesis and epoxide-2 (cox-2), p-nf-kappa B expression [2]. The cell autophagy can be induced by the effects of Rabdosia rubescens that interferes the mitosis of pc-3 and LNCaP of prostate cancer cells and increase the expression of autophagy associated protein map1-lc3 [3, 4]. The newactive structure ingredient diterpenoids KY3 of Rabdosia rubescens can destroy the microtubule structure of EC109 and inhibit its proliferation in vitro [5].

2.2 The Pharmacological Effects of Flavonoids
Flavonoids are very common; they are an important active ingredient in Chinese herbal medicine. Flavonoids are reported to have the effects of antibacterial anti-inflammatory, dilated coronary arteries and protect liver [6]. The study confirmed that the total flavonoids of Rabdosia rubescens can reduce the risk and the mortality of mice cerebral ischemia model, reduce the area of cerebral infarction, and improve the protective effect of ischemic preconditioning on brain injury; it also can enhance the activity of antioxidant enzymes, inhibit the generation of oxygen free radicals in the process of exercise, and improve the exercise ability of mice in mice [7].

2.3 The Pharmacological Effects of Polysaccharides
It has been shown that the material base of pharmacodynamics in Rabdosia rubescens contains not only lipid soluble components, but also water-soluble components. The literature reports that RPPSIIa has strong immune biological activity in the four polysaccharide (RPPS) components separated by 95% ethanol degreasing from Rabdosia rubescens [8]. The polysaccharide of Rabdosia rubescens has a strong ability to remove the diphenyl benzoyl hydrazine (DPPH) and hydroxyl radical, which has some anti-oxidative activity [9]. In addition, the polysaccharide component of dongling grass has obvious effect on the bladder tumor of C57BL / 6 mice, and the important organs of the mice were not significantly affected in the process of perfusion therapy [10].

2.4 The Pharmacological Effects of Organic Acids
The antibacterial activity of the extract of Rabdosia rubescens has been reported at home and abroad, but its main active component is still unknown. recent literature shows that the main antimicrobial activity of Rabdosia rubescens is ferulic acid and salicylic acid: Ferulic acid has some antibacterial activity against staphylococcus aureus (SA) and methicillin-resistant staphylococcus aureus (MRSA); Salicylic acid has antibacterial activity on the former [11]. The study also found that the active ingredient vanillic acid of Rabdosia rubescens has anticoagulant effect, ferulic acid; rosemary acid and salicylic acid have the effect of coagulation [12].

2.5 Others
In addition, Rabdosia rubescens also contains alkaloids, amino acids, steroids, volatile oils and other chemical components. The volatile components Caryophyllene has the effects of antiasthmatic and expectorant, has a good therapeutic effect on anxiety and depression. And patchouli alcohol has the functions of anti-inflammatory, antioxidant and antagonistic calcium ion abnormally elevated.

3. The clinical application of the Formuma and Chinese patent medicine of Rabdosia rubescens

3.1. The Application of the Formuma
The Precancerous Lesions of Gastric Cancer, PLGC belong to the "stomach" category of traditional Chinese medicine. The pathogenesis is stagnation of Qi, resistance of wet and heat, stagnation of blood stasis, deficiency of Yin fluid. The soup of winter snow detoxification and blood circulation containing
Rabdosia rubescens can obviously improving the clinical symptoms of PLGC patients and improving the immunity of gastric mucosa [13]. Rabdosia rubescens and dandelion compatibility have the effect of clearing away heat and toxic materials, invigorating stomach. It can be used for the treatment of acute and chronic gastritis, peptic ulcer and gastro esophageal reflux patients [14]. Blood stasis, wet, phlegm, stasis, heat toxin is the pathological basis of tumor pathogenesis, Liu Shangyi summed up the experience that medication of Rabdosia rubescens and turtle, zedoary, Humulus with corresponding phlegm, damp, Yu poison and heat stagnation, which has certain curative effect on cancer. Rabdosia rubescens and arisacma consanguineum, Houttuynia cordata, pollen Typhae combination can significantly improve the yellow greasy, smooth pulse, tongue central bulk stripping, normal urine but less sweat symptoms in patients with lung cancer [15].

3.2. The Application of the Chinese patent Medicine Containing Rabdosia Rubescens
Recurrent oral ulcer (ROU) is one of the three most common diseases in Department of Stomatolgy. The levels of Helicobacter pylori (HP) in the mouth of oral ulcers patients are significantly higher, while Rabdosia rubescens has excellent antibacterial activity and can improve the immunity of the body. Therefore, it can be used for the treatment of ROU. The results showed that the clinical efficacy of Rabdosia rubescens drop pills and compound Rabdosia rubescens buccal tablets in ROU patients was significant [16]. Chronic pharyngitis is caused by infection of pharyngeal inflammatory lesions, belong to the cateology of” hypopyretic laryngalgia” in TCM. Clinical study on treatment of chronic pharyngitis with Rabdosia rubescens syrup, the total effective rate was 96.05% [17]. In another study, Rabdosia rubescens tablets for the treatment of patients with acute pharyngitis, the recovery rate is 98.6% [18].

3.3. Other
Winter bamboo powder (Rabdosia rubescens, Chinese alangium leaf, Chinese ephedra, almond, lophatherum gracile, rhizoma phragmitis) used in the treatment of avian influenza poultry, the curative effect is remarkable, so as to make up the lack of antiviral western medicine in the treatment of febrile diseases [19]. Make the Chinese Formula made up by Rabdosia rubescens, coltsfoot, licorice and akebia used in Hawthorn orchards, weeds can be significantly suppressed. At the same time increasing orchard income, reducing the harm caused by the use of chemical herbicides [20]. The research showed that rubescensinon wheat scab, Sclerotinia sclerotiorum and other seven kinds of plant pathogenic fungal hyphae have a growth inhibitory effect, has certain antibacterial and induced resistance.

4. The Application of Diet Therapy

4.1. The Tea of Rabdosia Rubescens
Make the Rabdosia rubescens material into the pot, add water to boil for 2min, you can drink, three times a day. This tea has the functions of clearing away heat and toxic material and throat-clearing, can be used for the treatment of chronic pharyngitis or upper respiratory tract infection.

4.2. The Tea of Huai Chrysanthemum and Rabdosia Rubescens
Take Rabdosia rubescens, green tea, Chinese wolfberry, chrysanthemum and Chinese dates as raw materials, contains more than 40 kinds of trace elements and various amino acids. This tea has the effects of clearing away heat and toxic material, promoting blood circulation to arrest pain, an be used for the treatment of vomiting and cough.

4.3. The Tea of Rabdosia Yanqing
Take wild Rabdosia rubescens as the main raw material, plus honeysuckle, liquorice, momordica fruit, orange peel, platycodon root, mint and so on. Made on the basis of the theories of traditional Chinese medicine and advanced tea processing technology. The tea can purge intense heat, suitable for the people of throat discomfort and heat.
5. Outlook
Rabdosia rubescens is a perennial plant, has a strong adaptability, can be picked two times a year, and its crown has ornamental. Rabdosia rubescens as products of the homology of medicine and food, riched in Hebi area of Taihang Mountain. In 1977, it was first received by People's Republic of China Pharmacopoeia. Rabdosia rubescens has the effect of heat-clearing and detoxicating, promoting blood circulation to arrest pain and anti-tumor, antibacterial and anticancer, and has been praised by experts as the "king of Chinese medicine antibiotics". In the field of therapeutic health care and clinical, it has been used for the treatment of precancerous lesions of gastric cancer, acute and chronic gastritis, peptic ulcer, gastric reflux, lung cancer, prostate cancer and others. The existing animal experiments have proved that the composition of Rabdosia rubescens can significantly improve the hypoxia tolerance ability of mice under normal pressure, and has obtained the national patent for the application of Rabdosia rubescens extract in the preparation of drugs for treating cerebral ischemia [21]. In addition, Rabdosiae related prescriptions also can be used in the poultry plant, weeding, food preservation etc. and the effect is better.

With the medicinal value and therapeutic efficacy of Rabdosia rubescens becoming increasingly prominent, its cultivation and planting base is also expanding. However, Rabdosiae still exist the following problems in the application process. In medicinal research, the pharmacological effects and clinical efficacy of pharmacological effects and clinical efficacy has been well validated. But the water soluble components are hardly used, caused a large waste. Study on the pharmacological effects of the corresponding chemical constituents of Rabdosia rubescens is vague. Study on the effect of Rabdosia rubescens remains in the animal experiment stage, lacking of systematic, in-depth research and effective clinical trial data. Rabdosiae related Chinese medicine limited to the three types of pills, tablets and syrups, lack of innovation and application. Rabdosia rubescens cheap and easy to obtain, but the interest is low, it is likely to be ignored by some doctors, instead of selling high interest drugs to consumers.

To solve the above problems, the suggestions are as follows: Increase the development and utilization of water-soluble constituents of Rabdosia rubescens; Clear Rabdosiae material basis for efficacy in prevention and treatment of various diseases, make a targeted development and utilization; Strengthening Occupation Moral Education of medical and health related field, all in the interests of patients and healthy weight; Increase Rabdosia related prescription and Chinese patent medicine research efforts. To sum up, with the development of Chinese medicine and people's health awareness, we should carry on deep and meticulous research of Rabdosia rubescens, make the best use of it.

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