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Clinical Application and Dosage of *Trichosanthis Radix* in Treating Dryness Syndromes

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Abstract: *Objective:* To systematically summarize the clinical application and dosage-compatibility patterns of *Trichosanthis Radix* in treating dryness syndromes. *Methods:* Literature from classical famous prescriptions, renowned senior TCM practitioners, experts from the Committee on Dose-Effect of Chinese Materia Medica, and contemporary clinicians was retrieved to extract dosage ranges and compatibility characteristics. *Results:* The decoction dosage of *Trichosanthis Radix* for dryness syndromes ranges from 6 to 30 g, with a common dosage of 10–15 g; the compatibility and dosage vary according to different types of dryness syndromes. *Conclusion: Trichosanthis Radix* is effective in clearing heat, generating fluid, moistening dryness, and quenching thirst. It is indicated for lung-stomach dryness-heat, dry cough, constipation, and dryness arthralgia (Sjögren's syndrome), but its contraindications should be strictly observed.

Keywords: *Trichosanthis Radix*; Dryness syndrome; Dosage; Compatibility; Clinical application

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1. Introduction

Trichosanthis Radix is the dried root of *Trichosanthes kirilowi* Maxim or Trichosanthes rosthornii Harms in the Cucurbitaceae family. This product mainly contains trichosanthin, saponins, polysaccharides, citrulline, enzymes, and various amino acids. It has a sweet and slightly bitter taste, with a slightly cold nature, and belongs to the lung and stomach meridians. It has the effects of clearing heat, purging fire, generating fluids, quenching thirst, reducing swelling, and expelling pus. The Pharmacopoeia of the People's Republic of China records that the dosage for oral decoction is 10-15 grams. Dry syndrome is a disease caused by external pathogenic dryness or insufficient body fluid due to internal injury. Clinically, it is mainly manifested as dry mouth and throat, dry cough with less phlegm, dry and cracked skin, dry stool, dry tongue and less body

fluid. Dry evil can easily damage the body fluids. The lungs are delicate organs that prefer to moisten and dislike dryness, while the stomach is a sea of water and grains that prefers to moisten and dislikes dryness. Therefore, the responsibility for dryness syndrome lies mainly with the lungs and stomach. *Trichosanthis Radix* is sweet and cold, producing fluids, slightly bitter and descending and purging. It can clear the lungs and stomach heat, as well as nourish Yin and increase fluids. It is a commonly used medicine for treating dryness syndrome. This review systematically summarizes the clinical experience of traditional Chinese medicine ancient books and modern medical practitioners in using *Trichosanthis Radix* to treat dryness syndrome, explores its dosage and compatibility rules, in order to provide reference for rational clinical application.

2. Classic formula dosage and compatibility

In ancient times, traditional Chinese medicine practitioners often used a combination of *Trichosanthis Radix* and different herbs to treat dryness symptoms such as lung and stomach heat, thirst, dry cough, and constipation. The conversion of weights and measures varies in different dynasties, for example, in the Eastern Han Dynasty, one liang was about 13.8 g, in the Song, Jin, and Yuan Dynasties, one liang was about 41.4 g, in the Ming Dynasty, one liang was about 37 g, and in the Qing Dynasty, one liang was about 37.3 g. For example, in the Eastern Han Dynasty's "Synopsis of the Golden Chamber", the Gualou Qumai pill contains two liang (about 27.6 g) of *Trichosanthis Radix* powder (Gualou root), which can clear heat, produce fluids, moisten dryness, and quench thirst. It is also used in combination with Fuzi, Poria cocos, Yam, and Qumai, and is mainly used to treat symptoms such as deficiency of; Qing Dynasty's "Wen Bing Tiao Bian" Sha Shen Mai Dong Tang, *Trichosanthis Radix* (1.5 cents, about 5.6 g) moistens dryness and produces fluids, combined with Sha Shen, Mai Dong, Yu Zhu, mulberry leaves, and Sheng Gan Cao. It is mainly used for treating dryness and damage to the lungs and stomach Yin. Symptoms include dry throat, thirst, dry cough, and less phlegm; Jin's "Medical Origins": Mai Men Dong Yin Zi, *Trichosanthis Radix* (5 parts, about 2.07 g) clearing heat and generating fluids, combined with Mai Dong, Sheng Di Huang, ginseng, Schisandra chinensis, and Zhi Mu. It is mainly used for the treatment of diaphragmatic digestion (upper digestion), with symptoms such as chest fullness, restlessness, dryness of body fluids, and thirst; Qing Dynasty's "Yi Zong Jin Jian" is a thirst quenching formula, which uses two liang of *Trichosanthis Radix* (about 74.6 g, each dose about 6.2 g) to clear heat and promote fluid production. It is combined with Huanglian, Shengdihuang, lotus root juice, and cow's milk, and is mainly used for quenching thirst and promoting internal heat; Ming Dynasty's "Surgical Authenticity": Ruyi Jinhuang Powder, with *Trichosanthis Radix* (top-grade, suitable for external use), can clear heat, moisturize dryness, detoxify and reduce swelling. It is also used in combination with rhubarb, yellow cypress, turmeric, white atractylodes, and Magnolia officinalis for external application. It is mainly used to treat swelling and pain in abscesses and local skin dryness and redness; Tang Dynasty's "Essential Prescriptions for Preparing Urgent Qianjin": Gualou Root Powder, with two liang (about 27.6 g) of *Trichosanthis Radix* (Gualou Root), is used to clear heat, produce fluids, moisten dryness, and quench thirst. It is combined with Ophiopogon japonicus, Rehmannia glutinosa, Poria cocos, ginseng, and jujube, and is mainly used to quench thirst, drink more water, and dry mouth and tongue.

3. Experience in dosage and compatibility of renowned traditional Chinese medicine practitioners

3.1. Shi Jinmo

Shi Jinmo believes that quenching thirst disease is based on dryness and heat that damages the body's fluids and Yin deficiency, with dryness and heat as the standard. Patients with lung and stomach dryness and heat symptoms may experience thirst, excessive drinking, poor appetite, and dry mouth and tongue. The treatment involves nourishing Yin, clearing heat, generating fluids, and moistening dryness. Commonly used is the use of *Trichosanthis Radix* to clear heat, generate fluids, moisten dryness, and quench thirst. It is combined with Anemarrhena, gypsum, Ophiopogon japonicus, Rehmannia glutinosa, and Scrophularia suspensa to nourish Yin and increase fluid. The dosage of *Trichosanthis Radix* is 15-30 g [1]. If one is extremely thirsty and suffers from severe fluid damage, they can use up to 30g of *Trichosanthis Radix* and combine it with fresh dendrobium and fresh reed roots to enhance their ability to produce fluids [2].

3.2. Zhu Chenyu

Zhu Chenyu inherits Shi Jinmo's academic thought, and believes that the core pathogenesis of diabetes is the injury of both Qi and Yin, and the excess of dryness and heat. The treatment is to replenish Qi, nourish Yin, moisten dryness and clear heat. Zhu Lao has created a hypoglycemic formula, which commonly uses *Trichosanthis Radix* to clear the lungs and stomach, promote fluid production and quench thirst, and is combined with astragalus, yam, Atractylodes macrocephala, Scrophularia, and Pueraria root. The dosage of *Trichosanthis Radix* is 15-30 g [3]. Zhu Lao pointed out that "if urine sugar does not decrease, use 30g of pollen again". If there is also dry stool, add Polygonum multiflorum and hemp seeds to moisten the intestines and promote bowel movements [4].

3.3. Zhu Liangchun

Zhu Liangchun summarized the "five uses" of *Trichosanthis Radix*, believing that it is good at generating fluids and quenching thirst, and can damage the lungs and stomach due to fever. When *Trichosanthis Radix* enters the lung and stomach meridians, it can clear heat and generate fluids, which is beneficial for its growth. In the treatment of dry heat injury to the lung and phlegm is difficult, use *Trichosanthis Radix* in combination with fructus trichosanthis, almonds, fritillariae fritillariae, mulberry white bark and houttuynia cordata, and the dosage of *Trichosanthis Radix* is 20~30 g; in the treatment of diabetes with obvious dry heat, Zhang Xichun Yuye Decoction (Astragalus membranaceus, yam, *Trichosanthis Radix*, anemarrhena, kudzu, wuweizi, and chicken cauliflower) is commonly used, and the dosage of *Trichosanthis Radix* is 30 g, which can alleviate more than three symptoms [5, 6].

3.4. Lu Zhizheng

Lu Zhizheng believed that autumn dryness can be divided into warm dryness and cool dryness. Warm dryness is suitable for clearing and moistening the lungs, while cool dryness is suitable for warming and moistening the lungs. For the treatment of warm and dry cough, dry cough with less phlegm, and itching and sore throat, commonly used is the combination of *Trichosanthis Radix* with mulberry leaves, sand ginseng, Zhejiang Fritillaria, and almonds, with a dosage of 9-12g. For the treatment of cool and dry cough, the dosage of *Trichosanthis Radix* should be light (6-9g), combined with perilla leaves, almonds, and Campanula grandiflorum. Lu Lao pointed out that *Trichosanthis Radix* is "clear but not cold, moist but not greasy" and is

suitable for warming and drYing [8].

3.5. Yan Dexin

Yan Dexin believes that constipation in the elderly is mostly caused by deficiency of fluids and dryness of the intestines, and the treatment should focus on moistening the intestines. Commonly used to moisten and smooth the intestines with *Trichosanthis Radix*, combined with hemp kernels, plum kernels, raw Polygonum multiflorum, Angelica sinensis, and Cistanche deserticola. The dosage of *Trichosanthis Radix* is 10-15 g. If combined with lung dryness, dry cough, throat dryness, and mouth dryness, *Trichosanthis Radix* can be added up to 20 g [9]. Yan Lao emphasized that "*Trichosanthis Radix* moistens dryness and promotes bowel movements, and the beauty lies in the word 'moisten'. When moistened, dryness is naturally eliminated, and when dryness is eliminated, it promotes bowel movements [10].

3.6. Deng Tietao

Deng Tietao believed that after the fever subsides, it is common to see residual heat and damage to both Qi and Yin. Symptoms include persistent low-grade fever, dry mouth and throat, dry cough, and less phlegm. Therefore, the method should be to nourish the lungs and stomach with sweet and cold fluids. Commonly used *Trichosanthis Radix* is combined with sand ginseng, Ophiopogon japonicus, Polygonatum sibiricum, green beans, and mulberry leaves. The dosage of *Trichosanthis Radix* is 10-15 g. If the body is severely injured or thirsty, add 20-30 g of *Trichosanthis Radix* and mix with fresh reed roots and fresh dendrobium [11]. Deng Lao pointed out that *Trichosanthis Radix* is "a good product for recuperation after febrile diseases" [12].

3.7. Li Zhenhua

Li Zhenhua believes that the pathogenesis of Sjogren's syndrome (Dry Bi) is Yin deficiency and Jin deficiency, internal generation of dryness and heat, prolonged illness entering the meridians, blood stasis obstructing the meridians. Treatment should focus on nourishing Yin, moistening dryness, generating fluids, and unblocking collaterals. Commonly used *Trichosanthis Radix* is combined with Ophiopogon japonicus, Rehmannia glutinosa, Dendrobium officinale, Scrophularia ningpoensis, and Panax ginseng. The dosage of *Trichosanthis Radix* is 15-20 g. For those with obvious dry mouth, red tongue, and no coating, black plum and Schisandra chinensis are added for sour and sweet digestion; For those with dry eyes, add Lycii Fructus and Chrysanthemi Flos; Patients with joint pain should add Danshen and Chicken Blood Vine to promote blood circulation and unblock collaterals [13]. Li Lao emphasized that the treatment of dry rheumatism with *Trichosanthis Radix* should be taken for a long time with a slow onset [14].

3.8. Lv Renhe

Lv Renhe believed that people with diabetes who suffered from dryness and heat injury were more likely to suffer from thirst, grain elimination and hunger relief. The treatment should clear away heat, promote fluid production, moisten dryness and quench thirst. The commonly used combination of *Trichosanthis Radix* with kudzu root, yam, and cicada root is 20-30 g of *Trichosanthis Radix* [15]. Lv Lao pointed out that *Trichosanthis Radix* is good at clearing stomach heat and nourishing stomach Yin. It has the functions of clearing heat and generating fluids, eliminating irritability and quenching thirst. It is particularly suitable for those who suffer from fever and damage fluids, dry mouth and irritability, as well as Yin deficiency and internal heat, and

those who drink frequently to quench thirst [16].

4. Dosage and compatibility experience of experts from the formula-dose effect research committee

4.1. Tong Xiaolin

Academician Tong Xiaolin summarized the onset of diabetes into four stages: depression, heat, deficiency and damage. In the "heat" stage, it manifested as dry heat in the lung and stomach, body fluid consumption and injury. The symptoms were thirst, hunger, dry mouth and throat, dry stool, red tongue and yellow fur. Academician Tong believes that *Trichosanthis Radix* is "clear but not cold, moist but not greasy", which can not only remove the dryness and heat of the lung and stomach, but also nourish the body fluid consumed by injury. It can significantly improve the "three more or less" symptoms of diabetes patients when combined with coptis chinensis, anemarrhena asphodeloides, gypsum, etc. Commonly used in clinical practice is the combination of *Trichosanthis Radix* with products such as Huanglian, Zhimu, and gypsum to clear heat and moisten dryness. The dosage of *Trichosanthis Radix* is 15-30 g [17]. Academician Tong has developed his own "Zi Xiao Yin" drink, which combines three medicinal herbs: *Trichosanthis Radix*, Zhi Mu, and Ge Gen, and can be used in combination when exposed to heat and Yin damage. The commonly used dosage for *Trichosanthis Radix* is 15-30 g, Zhi Mu is 9-30 g, and Ge Gen is 15-60 g [18]. Academician Tong emphasized that *Trichosanthis Radix* is suitable for the dry heat syndrome in the "hot stage". If patients enter the "deficiency stage" and show Qi and Yin deficiency, spleen and stomach deficiency and cold, *Trichosanthis Radix* should be used with caution or combined with warm and tonifYing spleen and stomach products.

4.2. Li Saimei

Professor Li Saimei believes that patients with diabetes are prone to blood sugar fluctuations and repeated illness under stress, and common acute stress states include cold, infection, trauma, insomnia, etc. If you feel the evil of wind and heat, dry heat and damage the body fluids, and the symptoms include dry mouth and throat, frequent drinking and urination, you can give YinQiao Powder and Sangju Drink Xin Liang Jie Biao, and clear heat and produce body fluids with *Trichosanthis Radix*, moisten dryness and quench thirst. On the basis of Ge Gen Qin Lian Tang Rational Middle Pill, Professor Li has self formulated a cold, warm, and hypoglycemic formula, consisting of HuangQin, Huanglian, Ge Gen, dried ginger, Epimedium, Poria cocos, *Trichosanthis Radix*, Shengdihuang, Codonopsis pilosula, Atractylodes macrocephala, Paeonia lactiflora, corn silk, roasted licorice, etc., to clear heat and dampness, warm the middle and invigorate the spleen, achieving satisfactory therapeutic effects [19]. Professor Li commonly uses a combination of *Trichosanthis Radix* and peppermint, cicada molt, and other herbs in clinical practice to dispel wind and heat, and to penetrate pathogenic substances. This helps to eliminate dryness and heat, restore body fluids, gradually normalize blood sugar levels, and stabilize the condition. The dosage of *Trichosanthis Radix* is 10-15 g [20]. Professor Li emphasized that the use of classical prescriptions to treat diabetes with dryness and heat syndrome should focus on the differentiation of six meridians and eight principles, and pay attention to the priority of grasping the specimens of dryness and heat and deficiency and cold.

4.3. Fu Yanling

Professor Fu Yanling has long been engaged in dose research and clinical application of classic prescriptions

in the Treatise on Cold Damage, and is well versed in the compatibility rules of *Trichosanthis Radix* in classic prescriptions [21]. Professor Fu believes that *Trichosanthis Radix* powder, which is included in formulas such as Gualou Guizhi Tang and Gualou Oyster Powder in the Treatise on Cold Damage, is good at clearing heat, generating fluids, moistening dryness, and quenching thirst. In response to the physiological characteristics of delicate organs and insufficient Qi in children, Professor Fu believes that cough in children is often characterized by a mixture of deficiency and excess. It is often caused by food accumulation, heat dissipation, and damage to Yin, resulting in a pathological mechanism of Yin deficiency and heat. Symptoms include dry cough, less phlegm, dry throat, and dry mouth. Treatment requires replenishing the lungs and spleen on the basis of dispersing external pathogens, and at the same time, supplementing with *Trichosanthis Radix* to dispel wind and heat, detoxifYing and benefiting the throat. Professor Fu commonly uses the combination of *Trichosanthis Radix* and Campanula grandiflorum to promote lung and throat function in clinical practice. Both ingredients are used together to increase cough and throat relief, reduce swelling and promote bowel movements. The dosage of *Trichosanthis Radix* is 10g [22]. Professor Fu emphasized that *Trichosanthis Radix* is sweet, cold, and moist in nature. It is good at clearing the heat in the lungs and stomach and generating body fluids. It is particularly suitable for children with Yin deficiency, dryness, heat, and cough. However, it should be stopped when the disease is moderate and should not be used excessively to avoid cold and damage to the spleen and stomach.

4.4. Zhang Binghou

Professor Zhang Binghou believes that blood heat mixed with wind, dryness and heat damaging fluids are important pathological mechanisms for various skin diseases and internal injuries. Clinical treatment should be based on the methods of cooling blood, dispelling wind, clearing heat and detoxifYing, moistening dryness and generating body fluids. It is common to use a combination of *Trichosanthis Radix* and skin medicines such as mulberry bark, peony bark, white fresh bark, and sea tung bark to promote blood circulation, remove blood stasis, clear heat and dampness, relieve fire and detoxify, dispel wind and relieve itching. Professor Zhang pointed out that *Trichosanthis Radix* is sweet, cold, and moist in nature. It can not only clear heat and cool blood to dispel heat, but also generate fluids to moisten dryness and restore its essence. It is particularly suitable for skin dryness, itching, dry mouth, and throat caused by Yin deficiency and dryness, blood heat and wind. Professor Zhang commonly uses *Trichosanthis Radix* powder in combination with peony bark, raw Rehmannia glutinosa, and other blood cooling and moisturizing products in clinical practice. The dosage of *Trichosanthis Radix* powder is 12-30g. Professor Zhang emphasizes that when *Trichosanthis Radix* powder is used for dry and hot skin diseases, the dosage should be flexibly adjusted according to the dryness of the skin lesions and the loss of body fluids. For mild cases, 12-15g is used, and for severe cases with obvious dry and hot skin, up to 30g can be used [23].

4.5. Li Jiren

Professor Li Jiren, a master of traditional Chinese medicine, is the representative of Xin'an Medicine and has rich experience in the treatment of diabetes (diabetes). Li Lao believes that the pathogenesis of diabetes is based on Yin deficiency and marked by dryness and heat. If the lungs are dry, thirst and drink more; if the stomach is dry, reduce hunger and thirst; and if the kidneys are dry, frequent urination. *Trichosanthis Radix* is sweet, cold, and moist in nature. It can not only clear the dryness and heat in the lungs and stomach, but also nourish and consume the body fluids of the injured. It is an essential medicine for treating the syndrome

of quenching thirst and dryness and heat. In clinical practice, Li Lao commonly uses a combination of *Trichosanthis Radix* and astragalus, yam, Anemarrhena, kudzu root, schisandra chinensis, etc. to nourish Qi and Yin, clear heat and moisten dryness. Li Lao often uses a combination of 15g of *Trichosanthis Radix* and 30g of sand ginseng, 15g of jade bamboo, 15g of Ophiopogon japonicus, and other nourishing Yin and moistening lung products in his empirical formula to treat patients with deficiency of both thirst and Qi Yin, as well as dryness, heat, and fluid damage; Li Lao pointed out that when using *Trichosanthis Radix* for quenching thirst and heat syndrome, the dosage should be sufficient, but it needs to be flexibly adjusted according to the patient's physical condition and degree of heat. For mild symptoms, 10-15 g should be used, and for severe cases with obvious thirst, 20-30 g can be used. Li Lao also emphasized that *Trichosanthis Radix* is the opposite of Aconitum medicinal materials, and contraindications should be noted when clinical compatibility [24].

5. Modern physician dosage and compatibility

5.1. Compatibility of yam, pueraria root, and anemarrhena

Li Yanlin believes that the symptoms of Sjogren's syndrome (Yin deficiency and lack of fluid) include dry mouth and throat, thirst leading to drinking, no relief after drinking, frequent urination, dry eyes, restlessness and tinnitus, red tongue with little coating, and fine pulse. The disease is characterized by the deficiency of thirst and the elimination of dampness, the consumption of pathogenic factors that damage Yin fluid, the inability to clear the spleen, and the deficiency of stomach dryness and fluid. Commonly used combination of Chinese yam, kudzu root, Anemarrhena chinensis, Schisandra chinensis, Astragalus membranaceus, and chicken internal gold, with a dosage of 10g. If thirsty, add Taizi ginseng to supplement the lungs and promote fluid production; Increasing kudzu root to 30g to enhance its ability to produce saliva [25].

5.2. Compatibility of Yam, *Rehmannia glutinosa*, *Ophiopogon japonicus*

Yan Dongbiao believes that diabetes (lung spleen kidney Yin deficiency syndrome) is characterized by excessive drinking, excessive urine, excessive food consumption, emaciation, dry mouth and dry throat, five heart irritability, itching around the body, red tongue with less coating, and thin pulse. It is advisable to clear heat, promote fluid production, moisten dryness and quench thirst, and promote blood circulation to remove blood stasis. Commonly used combination of Chinese yam, raw Rehmannia glutinosa, Ophiopogon japonicus, Panax ginseng, Paeonia lactiflora, Salvia miltiorrhiza, and Paeonia lactiflora, with a dosage of *Trichosanthis Radix* 30 g, Dioscoreae Rhizoma 60 g, 30g of raw Rehmannia glutinosa, 30g of Ophiopogon japonicus, and 30g of Panax ginseng. If dizziness and high blood pressure occur, Tianma, Gouteng, and Shixianming can be added to calm the liver's latent Yang [26].

5.3. Compatibility of Platycodon grandiflorum, Hemp Seed, Peach Seed

Duan Fujin believes that habitual constipation (lung spleen Qi deficiency, fluid deficiency, and intestinal dryness syndrome) is characterized by repeated constipation, abdominal distension, severe postprandial bloating, slight coughing and wheezing, hardened stool, difficulty and discomfort, thin and emaciated appearance, fine and astringent veins, thin and white coating, pale red tongue, and thin texture. Treatment should focus on nourishing Qi and moistening the intestines. Commonly used *Trichosanthis Radix* is combined with roasted Astragalus membranaceus, Codonopsis pilosula, stir fried Atractylodes macrocephala,

Rehmannia glutinosa, Angelica sinensis, Cimicifuga, stir fried Fructus Aurantii, Phellodendron amurense, Eucommia ulmoides, Cistanche deserticola, Hemp seeds, Peach kernels, Almonds, Pine nuts, Platycodon grandiflorus, Orange blossom, and Agarwood. The dosage of *Trichosanthis Radix* is 10g, and taking 30 doses in a row can relieve bloating and improve bowel movements [27].

6. Conclusion

By summarizing the clinical experience of classic famous prescriptions, renowned senior TCM practitioners, experts of the dosage effect research committee of prescriptions and modern physicians in the treatment of dryness syndrome with *Trichosanthis Radix*, the dosage range of *Trichosanthis Radix* for dryness syndrome is 6~30g, and the commonly used dosage is 10~15g. In clinical application, the best dosage and compatibility should be selected according to the type of dryness syndrome, disease types and symptoms: for the lung and stomach dryness syndrome (thirst elimination, diabetes, and heat injury), those whose symptoms are characterized by thirst, dry mouth and tongue, hunger elimination, red tongue and yellow fur, are often compatible with anemarrhenna, plaster, ophiopogon japonicus, raw rehmannia root, scrophularis root, coptis chinensis, and schisandra chinensis, etc. The dosage of decoction is 15-30 g, and 30 g can be used for severe thirst. The representative prescriptions are Xiaoke Recipe, Yuye Decoction, Zishen Drink; Used for cough caused by dryness in the lungs and heat. For warm and dry cases, mulberry leaves, ginseng, Fritillaria thunbergii, and almonds are often used in combination. The dosage of *Trichosanthis Radix* is 9-12g, and for cool and dry cases, it is recommended to use light doses (6-9g). It is also used in combination with perilla leaves, almonds, and Campanula grandiflorum. Representative formulas include Shashen Maidong Tang and Sangxing Tang; Used for constipation caused by intestinal dryness (Jin deficiency and intestinal dryness syndrome), with symptoms such as dry stools, frequent bowel movements, and dry mouth and throat. It is often combined with Huomahen, Yuliren, Polygonum multiflorum, Angelica sinensis, Cistanche deserticola, peach kernels, almonds, etc. The dosage of the decoction is 10-20 g, and for those with lung dryness and dry cough, it can be added up to 20 g. The representative formula is YiQi Runchang Tang; Used for dry syndrome (dry rheumatism), symptoms include dry mouth, dry eyes, dry skin, joint pain, and red tongue with little saliva. It is often combined with Ophiopogon japonicus, Rehmannia glutinosa, Dendrobium officinale, Scrophularia ningpoensis, and Panax ginseng. For those with obvious dry mouth and red tongue without coating, Wumei and Schisandra chinensis are added. For those with dry eyes, Lycii Fructus and Chrysanthemi Flos are added. For those with joint pain, Danshen and Chicken Blood Vine are added to promote blood circulation and unblock collaterals. The dosage of the decoction is 15-20 g. It is used for sores and abscesses (dry heat accumulation syndrome), symptoms include red and swollen sores, dry skin, and less pus after ulceration. For oral administration, it is often combined with Honeysuckle, Forsythia suspensa, and Bai Zhi, with a dosage of 10-15 g. Apply an appropriate amount of grinding powder and apply it, with the representative formula being Ruyi Jinhuang San. Modern pharmacological research has confirmed that *Trichosanthis Radix* has effects such as lowering blood sugar, anti-inflammatory, immune regulation, antiviral, anti-tumor, and promoting wound healing. Among them, Trichosanthin has the function of inducing labor, so it is contraindicated for pregnant women [28]. The clinical application of *Trichosanthis Radix* in the treatment of dryness syndrome has a wide safety range. There are no significant toxic side effects observed under the dosage of commonly used decoctions (6-30g). However, it should be avoided for patients with

spleen and stomach deficiency cold and loose stools. Moreover, *Trichosanthis Radix* is the opposite of aconite medicinal materials, and caution should be taken when combining them clinically. This review systematically summarizes the clinical experience of medical practitioners throughout history in using *Trichosanthis Radix* to treat dryness syndrome, analyzes its dosage effect relationship and compatibility rules, in order to provide reference for the rational application of *Trichosanthis Radix* in the treatment of dryness syndrome in clinical practice.

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