# Clinical Research Progress on Treating Anal Sinusitis with Blood-Promoting and Stasis-Removing Method

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Abstract: Anal sinusitis is a type of perianal infection caused by infection in the anal sinus, anal valve or anal gland. Because of its lingering and difficult to cure, the course of the disease has become a common and difficult disease in the anorectal department, if not treated in time, the expansion of the lesion will easily lead to perianal abscess, anal fistula and other diseases. Therefore, once the disease is diagnosed, it should be actively intervened to prevent the disease progression from affecting the quality of life of patients. Blood stasis, as one of the pathogenesis of the disease, has been paid more and more attention by clinicians. This paper analyzed the mechanism of blood stasis causing the disease, reviewed the latest clinical studies of traditional Chinese medicine (oral Chinese medicine, fumigation and sit-bath, suppository, paste, enema), reviewed the current status of the treatment of anal sinusitis by promoting blood circulation and removing blood stasis, analyzed the shortcomings of the current research, and prospected the future research direction.

**Keywords:** Promoting blood circulation and removing blood stasis; Anal sinusitis; Traditional Chinese medicine; Clinical research

#### 1. Introduction

Anal sinusitis, also known as anal cryptitis (AC), is a type of perianal infection caused by infection in the anal sinus, anal valve or anal gland. Clinically, it is usually manifested as stabbing, burning or dull pain in the anus, accompanied by a feeling of rectal distention and falling, a feeling of incomplete defecation, a feeling of foreign body in the anus, and itching around the anus, which seriously affects the quality of life of patients. At the same time, studies have shown that about 85% of anorectal diseases are secondary to AC [1], so active treatment of AC plays a key role in preventing and preventing hemorrhoids, perianal abscess, anal fistula and other anorectal diseases before they occur [2]. At present, there are still differences on the distribution of TCM syndrome types of anal sinusitis. Literature [3] classifies them into syndrome of damp-heat accumulation, syndrome of heat-toxic accumulation, syndrome of spleen deficiency and qi depression, and syndrome of qi stagnation and blood stasis. The use of traditional Chinese medicine can be used for the treatment of anal sinusitis syndrome differentiation, through the adjustment of the whole body qi and blood circulation, to achieve the purpose of treating the anal sinusitis of qi stagnation and blood stasis, which is the advantage of traditional Chinese medicine in the treatment of this disease, with better clinical efficacy. Therefore, this paper tries to conduct a systematic review on the anal sinusitis of Qi stagnation and blood stasis from the perspective of promoting blood stasis, in order to provide clinical help.

#### 2. Etiology and pathogenesis

#### 2.1. Western Medical Perspective

The occurrence of AC is often considered by Western medicine to be related to the special anatomical structure of anal sinus [4], and the naturally formed hollow recess between the anal flap and the bottom of the two anal columns is called anal sinus, also known as anal recess. The opening is upward, toward the rectal cavity, behind the anal flap and funnel-shaped. Under normal circumstances,

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the anal crypt is in a closed state and will not be contaminated by feces, but in diarrhea, loose stool is easy to enter the anal crypt, making it infected and causing inflammation(as shown in Figure 1); At the same time, if the patient's stool is dry and hard or there are sharp objects in the stool and scratch the anal sinus and anal nipple, it will lead to anal sinusitis or anal papilitis. Therefore, patients with other anorectal diseases that stimulate anal sinus, such as enteritis, diarrhea, constipation, dysentery, etc., are more likely to suffer from anal sinusitis[5].

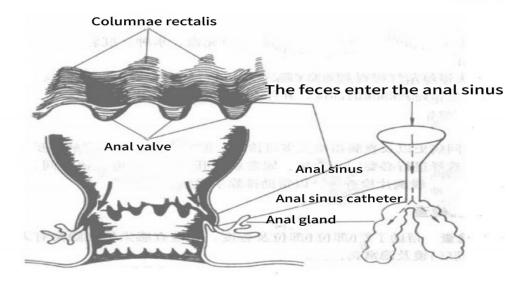


Figure 1. Anatomy of anal occult cavity

#### 2.2. TCM Perspective

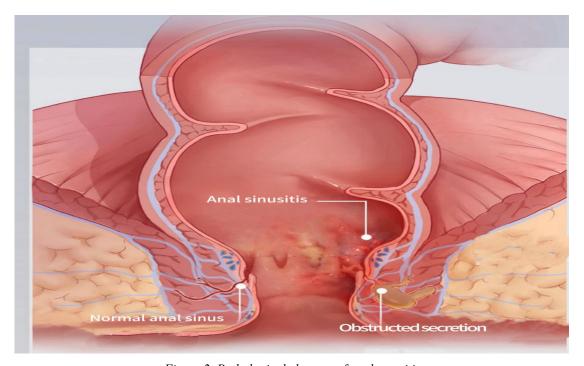


Figure 2. Pathological changes of anal cryptitis

Although there is no clear Chinese medicine disease name corresponding to AC, but according to its clinical manifestations can be attributed to the Chinese medicine "zang-poison", "hanging beads hemorrhoids" and other categories, Wang Weide *Surgical collection* recorded: "zang-poison, pure wine thick taste, hard work, accumulated poison flow into the anus." Traditional Chinese medicine believes that long-term improper diet, excessive spicy food, alcohol and thick taste cause damage to the spleen and stomach, the spleen and stomach transport function is reduced, the water is not wet, wet and heat force the large intestine, resulting in the movement of Qi and blood is not smooth; At the same time, the

anus is located at the end of the limb, the blood circulation is poor, and the defecation force is easy to make blood stasis in the anus, for a long time, the Qi machine is not smooth, "Qi is blood, Qi stagnation is blood stasis", the formation of the pathogenesis of qi stagnation and blood stasis, not general pain, so see anal pain and other symptoms. Modern studies have shown that the pathological manifestations of the acute stage of inflammation are hemodynamic (blood flow and vascular diameter) changes. In the initial stage of inflammation, there is a brief contraction of the arteriole, which lasts for a few seconds and then the arteriole begins to expand, and the number of open capillaries increases accordingly, which accelerates local blood flow and triggers a series of inflammatory reactions involving local redness and fever. At this time, due to the increase of vascular permeability, protein-rich liquid in the blood vessels oozes out of the blood vessels, resulting in continuous accumulation of red blood cells in the blood vessels, resulting in increased blood concentration, and finally, red blood cells fill the dilated small blood vessels, causing blood stagnation [6-8]. It can be seen that blood stasis caused by inflammation is an important reason for the formation of blood stasis in traditional Chinese medicine. In short, blood stasis is closely related to the occurrence of AC and runs through the entire disease, which is an important pathogenesis of the disease's prolongation and difficult to cure, and also the outcome of the initial mistreatment of the disease (as shown in Figure 2).

#### 3. Qi stagnation and blood stasis type anal sinusitis

Liu Renghai believed that the syndrome of qi stagnation and blood stasis belongs to the acute attack stage of AC [9], and its pain is relatively severe, which can radiate to the sacrococcygeal and anterior pubic regions in severe cases. Qi stagnation and blood stasis type AC: Main symptoms: anal distension discomfort, stinging pain, fixed pain, or burning tingling, aggravated when stool. Secondary symptoms: stinging pain at night, accompanied by insomnia, anxiety, dreaminess. Microscopic examination of the anus showed congestion and edema in the anal sinus, dark red. Tongue and pulse: dark purple tongue, thin fur, and astringent pulse [10].

# 4. Using the method of promoting blood circulation and removing blood stasis to treat anal sinusitis

Tang Rongchuan[11] divided stool blood into blood under zang-poison and blood under intestinal wind in his book on Blood Syndrome · Blood in the stool. He believed that the cause of zang-poison lies in dampness-heat stroke and stagnation of Qi and blood, that is, dampness-heat stroke each other in the intestine, and the adverse operation of the intestine leads to local qi and blood obstruction, endogenous blood stasis obstructs the soul gate, and the formation of dampness-heat stasis is zang-poison. In treatment, the principle of clearing heat and dampness, regulating qi and resolving stagnation, promoting blood circulation and removing blood stasis is advocated. Modern famous doctor Professor Zhang Yansheng [12] believes that anal sinusitis, anal carbuncle and anal leakage are equivalent to the initial stage of traditional Chinese surgery, carbuncle and abscess, and anal sinusitis is in the stage of not forming pus or spreading toxic pathogens. The disease is in the stage of accumulation of pathogenic toxins, obstruction of meridians, and stagnation of qi and blood. The treatment follows the principles of "elimination, support and toning" of traditional Chinese surgery, and integrates "elimination method" and "support method" for treatment. Clinically, promoting blood circulation and clearing collaterals, dispersing stasis and relieving pain are the treatment principles. According to Zhang Chaoyang [13], through data mining, there were a total of 26 kinds of TCM enema used with a frequency of more than 10 flavors, of which 4 had the effect of promoting blood circulation and removing blood stasis, ranking second. Therefore, promoting blood circulation and removing blood stasis was the main treatment for AC. Deng Zetan believed that blood stasis was closely related to the occurrence of diseases of the large intestine and anus, and applied the method of promoting blood stasis to treat anorectal diseases. Huang Yan pointed out that the anus is the officer of blood storage, the blood is easy to stagnation here, the anus is the "valve" of excreting dross, the disease is toxic, damage blood vessels; The method of promoting blood circulation to dissipate stasis and detoxification should be selected for treatment. It can be seen that the treatment of anal sinusitis by doctors in the past dynasties has not only started from the Angle of promoting blood circulation and removing blood stasis, but also achieved satisfactory curative effect through symptomatic treatment, and provided ideas for clinical work.

#### 4.1. Oral Chinese medicine

Lai Richang [14] self-designed active serum Dou prescription for treatment of anal sinusitis of Qi

stagnation and blood stasis type. A control group of 32 cases was given routine treatment (oral cefdinir, topical Fuzhiqing ointment changed, continuous administration for 15 days). On the basis of conventional treatment, 32 patients in the treatment group were given oral live serum Douzhou formula (peach kernel 12 g, safflower 12 g, Moutan bark 9 g, salvia miltiorrhiza 9 g, Leonurus 12 g, rhizome fructus 9 g, Xyloxiang 6 g, glycyrrhiza 9 g; 7 doses for 1 course of treatment, continuous use of 2 courses). The results showed that the total effective rate in the treatment group was 93.75% (30 cases). The total effective rate of control group was 68.75% (22 cases). This prescription to peach kernel, safflower as the king, blood circulation and blood stasis to cure the root, peach kernel quality can be smooth; Salvia miltiorrhiza and moutan bark are the official medicine to enhance the effect of activating blood circulation and removing blood stasis; Skin seed dispel wind and itch; Motherwort promoting blood circulation and removing blood stasis, clearing heat and detoxifying; Xyloxiang regulates qi and stomach, Qi is blood, and prevents the drug from sticking; Licorice can blend all kinds of drugs. The main effect of the whole prescription is to promote blood circulation and remove blood stasis, regulate qi and stomach, dispel wind and relieve itching.

Huang Yan[15] believed that the basic pathologic causes of anal inflammatory diseases were: Qi and blood disharmony in the muscles, poor functioning, qi stagnation and blood stasis. Therefore, the use of self-designed Jiedu Sanyu decoction to treat AC has remarkable effect. A total of 120 patients with anal inflammatory diseases (anal sinusitis, inflammatory mixed hemorrhoids) were collected and divided into three groups with 40 cases in each group, which were Diossmin group, berberine group and Jiedu Sanyu decoction group. The results of the above 3 groups were observed after 5 days as a course of treatment and two consecutive courses of treatment. The results showed that the total effective rate was 87.5% (35 cases) in Dioxamine group. The total effective rate of berberine group was 72.5% (29 cases). The total effective rate of Jiedu Sanyu decoction group was 95% (38 cases). Drug composition of Jiedu Syu Decoction: Coptis 6g, gardenia 12g, Phellodendron 8g, gypsum 15g, frankincense 20g, machitia 15g, Angelica 6g, Radix Paeoniae 20g, Fructus aurantii 12g, Schizonepeta 12g, corydalis 12g. Prescription to Coptis as the king medicine, with gardenia, yellow cypress, plaster Qingheat purging fire, dry dampness detoxification, with Danggui, frankincense, Radix paeoniae, corydalis activating blood stasis, qi analgesia, fructus citri, Nepeta as qi medicine, take "Qi is blood", "Qi is the shuai of blood" meaning, Qi to mobilize blood operation, play the effect of activating blood, all drugs play the effect of clearing heat detoxification, activating blood stasis.

Guo Guangli[16] believed that qi stagnation and blood stasis was the pathogenic mechanism of AC, so 48 cases of AC were treated with oral Taohong Siwu Decoction, which included peach kernel 10g, safflower 10g, Chuanxiong (Szechuan Lovage Rhizome) 10g, Angelica 10g, Chishao (Paeonia lactiflora root) 15g and Shengdihuang (Fresh Rehmannia Root) 10g. Combined with self-prepared enema formula: Chishao (Paeonia lactiflora root) 10g, Angelica 10g, Rhubarb 10g, Baijiangcao (Patrinia Herb) 30g, Huangbai (Amur Cork Tree Bark) 10g; 10 days for 1 course, a total of 2 courses. The results showed that the total effective rate was 93.75% (45 cases). In the formula, peach kernel, safflower activating blood stasis for pain relief, Angelica tonifying blood activating blood, Chuanxiong activating blood qi for pain relief, passing the gas in the blood, and the upper three drugs for blood stagnation, blood stasis removal and new blood production, red peony, Shengdihuang clear heat cool blood for pain relief. Modern pharmacological studies have shown that Taohong Siwu decoction can smooth the blood circulation of the whole body, further promote the local blood and microcirculation of the anus, and improve the congestion, edema and inflammation of the anal sinus[17]. It can also increase the local coagulation time and reduce the occurrence of local inflammatory reaction through its effect of promoting blood circulation and removing blood stasis, so as to relieve the pain of patients in the acute stage of AC.

He Dandan [18] believed that anal sinusitis was caused by the irregularity of qi and blood, the anus was broken down and infected with poison, which damaged the ying blood, thus forming the blood stasis and poison syndrome of "poison" and "blood stasis" interjunction. In treatment, he upheld the method of detoxifying blood stasis, and gave Jiedu Sanyu Decoction with positive effect. A total of 98 patients were included in the study, and they were divided into Chinese medicine group and Western medicine group. In the traditional Chinese medicine group, 43 cases were treated with oral Jiedu Syu decoction: Chishao 15g, Red Sage Root 10g, Ophioglossum 10g, Zhizi (Gardenia Fruit) 8g, Yujin (Aromatic Turmeric Tuber) 10g, Yinchen (Capillary Wormwood) 15g, Tianjihuang (Japanese St. John's Wort) 15g, Shichangpu (Tatarinow's Sweetflag Rhizome) 10g, Tongcao (Rice Paper Plant Pith) 10g, Zhike (Bitter Orange Peel) 6g, Gancao (Licorice Root) 5g, Dahuang 10g, 15 days as a course of treatment, two consecutive courses of oral treatment; In the western medicine group, 55 cases were treated with oral levofloxacin combined with nanomesalazine suppository, and the curative effect was observed after two weeks of continuous treatment. The results showed that the total effective rate of

TCM group was 97.67% (42 cases). The total effective rate of the western medicine group was 81.82% (45 cases). The total effective rate of the Chinese medicine group was significantly higher than that of the Western medicine group (P < 0.05). Formula selection of a variety of heat and dampness antidote, at the same time reuse Chishao, Tianjihuang to disperse blood stasis to reduce swelling and pain, Danshen activating blood stasis, Yujin activating blood Qi analgesia, Dahuang to remove blood stasis through the menstrual cycle, the whole formula played the effect of clearing heat and detoxifying, activating blood and dispersing blood stasis.

#### 4.2. Fumigation sitz bath

Traditional Chinese herbal fumigation and sitz baths allow medicinal effects to directly target the affected area. Through the temperature and efficacy of the herbs, they promote local blood circulation, improve blood stasis, and enhance microcirculation. This is a widely used external treatment in clinical TCM practice[19]. The method involves placing herbs with properties to activate blood circulation, resolve stasis, reduce inflammation, and alleviate pain into non-woven fabric bags. The bags are immersed in boiling water ( $\geq 100^{\circ}$  C), and once the water cools to a skin-tolerable temperature, patients are instructed to first fumigate and then wash the anal area. This is performed twice daily for 10-15 minutes per session.

Bian Xuechun[20] posits that anal cryptitis (AC) is closely related to imbalances of yin-yang, stagnation of qi and blood, and blood stasis blocking meridians. Thus, the clinical treatment principles focus on harmonizing yin-yang, activating blood circulation to resolve stasis, and clearing heat to relieve pain. A self-prescribed sitz bath formula combined with Jiuhua ointment was used to treat AC in 62 patients. The control group (31 cases) received Jiuhua ointment applied intra-anally once daily. The treatment group (31 cases) used the self-prescribed sitz bath formula:peach kernel 18 g,safflower 18 g, Danggui 18 g, Kushen(Sophora flavescens root) 36 g, Huangbai 36g,Qinjiao (Gentiana macrophylla root) 36 g, Fangfeng (Saposhnikovia divaricata root) 36 g, Guihua (Osmanthus fragrans flower) 36 g, Xuanshen(Scrophularia ningpoensis root) 36 g,followed by Jiuhua ointment once daily. After 7 days, the total efficacy rates were 77.42% (24 cases) in the control group and 96.77% (30 cases) in the treatment group (P < 0.05), demonstrating the effectiveness of blood-activating and stasis-resolving methods. The formula synergizes blood circulation promotion (peach kernel, safflower, Danggui), heat-clearing (Huangbai, Kushen), and dampness-dispelling (Qinjiao, Fangfeng), collectively achieving anti-inflammatory and analgesic effects.

Deng Zetan[21] emphasizes the importance of blood-activating and stasis-resolving therapies in treating anorectal diseases. A modified Taohong Siwu Decoction was administered orally and as a sitz bath to 188 patients. The control group (94 cases) received potassium permanganate sitz baths (1:5000) nightly and oral amoxicillin capsules. The treatment group (94 cases) used the modified formula: peach kernel 15 g,safflower 15 g, Chishao 12 g, Chuanxiong 12 g, Danggui 15 g, Shengdihuang 15 g, Huaimi (Sophora japonica flower bud) 15 g, Diyu (Sanguisorba officinalis root) 10 g, Kushen 10 g, Machixian (Portulaca oleracea herb) 15 g. The decoction (200 ml) was taken orally twice daily, and residual herbs were boiled into 2000 ml for nightly sitz baths. After one week, the total efficacy rates were 60.6% (control) and 96.7% (treatment). The formula enhances the classic Taohong Siwu Decoction's blood-activating effects with Huaimi (meridian-guiding herb for anorectal disorders) and Diyu (cool blood), supported by Kushen and Machixian for heat-clearing and stasis resolution [22].

#### 4.3. Suppositories

Suppositories are solid formulations made by combining targeted herbs with excipients. Inserted 2 cm into the anal canal near the dentate line, they gradually dissolve to deliver localized therapeutic effects.

He Zhibin [23] proposed that the pathogenesis of this disease arises from stagnation of qi and blood, with blood stasis obstructing local collaterals. The treatment principle should focus on activating blood circulation to resolve stasis, and promoting qi flow to alleviate pain. His clinical study demonstrated satisfactory efficacy using a self-formulated Safflower Hemorrhoid Suppository (composed of Carthamus tinctorius, Panax notoginseng powder, Daemonorops draco resin, Curcuma aromatica, Agrimonia pilosa, Ligusticum chuanxiong, Rheum palmatum, Coptis chinensis, Phellodendron chinense, Sanguisorba officinalis, Borneolum syntheticum, and Angelica dahurica) combined with anal cavity therapeutic apparatus for treating anal sinusitis. The randomized controlled trial involved 75 patients in each group. The observation group received nightly warm sitz baths followed by anal

insertion of one safflower suppository combined with therapeutic massage, while the control group underwent metronidazole solution and gentamicin enema with massage. After 30-day treatment, the observation group showed significantly higher total effectiveness rate (97.33%, 73 cases) compared to the control group (78.67%, 59 cases) (P<0.05), indicating statistically significant advantages. Pharmacological analysis revealed that the formula employs Carthamus tinctorius as the monarch herb for blood-activating and pain-relieving effects. Key components work synergistically: Panax notoginseng and Agrimonia pilosa resolve stasis, Daemonorops draco promotes blood circulation and hemostasis, Curcuma aromatica and Ligusticum chuanxiong regulate qi-blood interaction, while other herbs collectively exert heat-clearing, swelling-reducing, and analgesic effects. This formulation demonstrates significant therapeutic value for blood stasis-type anal sinusitis when applied through syndrome differentiation.

Liu Jizhong [24] attributed the etiology of anal cryptitis (AC) to qi stagnation and blood stasis obstructing meridians, advocating treatment principles of activating blood circulation, resolving stasis, clearing heat, and reducing swelling. A clinical observation was conducted on 120 patients using the Huoxue Jiedu Zhitong Suppository (Blood-Activating and Detoxifying Analgesic Suppository). The treatment group (60 cases) received anal insertion of the suppository twice daily (containing Salvia miltiorrhiza, Panax notoginseng powder, Corydalis yanhusuo, Borneolum syntheticum, Scutellaria baicalensis, Cimicifuga foetida, and Sanguisorba officinalis), while the control group (60 cases) underwent daily 50 mL retention enemas with Metronidazole, Gentamicin, and Dexamethasone. Both groups completed three 10-day treatment courses. Results demonstrated significantly higher efficacy in the treatment group (96.7%, 58 cases) compared to the control group (76.7%, 46 cases) (P<0.05), confirming the suppository's clinical value for AC of qi stagnation and blood stasis type. Pharmacological analysis revealed: Sanguisorba officinalis serves as a meridian-guiding agent[22]. Salvia miltiorrhiza and Panax notoginseng activate blood circulation and alleviate pain. Corydalis yanhusuo promotes qi-blood movement and analgesia. Borneolum syntheticum clears heat and reduces swelling. Scutellaria baicalensis eliminates damp-heat. Cimicifuga foetida elevates yang while clearing heat, alleviating anal distension. This formula synergistically achieves blood activation, stasis resolution, heat clearance, and swelling reduction through integrated pharmacological actions.

#### 4.4. Ointments

In clinical practice, this method is often combined with other therapeutic agents. The prepared herbal formulation is typically processed into an ointment and applied topically. When necessary, practitioners wearing gloves gently insert the medication 2-3 cm into the anal canal using their fingers. This approach enables direct drug delivery to the affected area, offering advantages including rapid onset of action, simple application procedure, and minimal discomfort, thereby demonstrating high patient compliance.

Cheng Limin [25] synthesized clinical experiences from multiple medical experts who treated anal cryptitis (AC) through qi-activating, blood-circulating, and stagnation-removing therapies. Guided by these principles, she developed the self-formulated Pubai Zhitong Ointment (AC-Relieving Ointment) containing:Puhuang (Pollen Typhae) for hemostasis and stasis resolutionHuzhang (Polygonum cuspidatum) to clear heat and alleviate pain. Baiji (Bletilla striata) and Wubeizi (Galla Chinensis) for astringent hemostasis.Mugua (Chaenomeles speciosa) to activate blood circulation.Additional herbs including Mabiancao (Verbena officinalis), Huangbai (Phellodendron chinense), Jinyinhua (Lonicera japonica), Xiongdan (Ursus biliary extract), and Bingpian (Borneolum syntheticum) for heat-clearing and detoxification. A clinical trial enrolled 80 patients, equally divided into treatment and control groups. The treatment group received anal administration of the ointment (2-3 cm depth via applicator post-defecation), while the control group used Jiuhua Ointment similarly. Both groups underwent 10-day treatments with efficacy evaluations on days 1, 4, 7, and 10.Results: Significantly lower pain (VAS) and edema scores in the treatment group (P < 0.05). Early-phase exudation scores initially higher but ultimately lower than controls (P < 0.05), suggesting the formulation first creates a moist wound-healing microenvironment before promoting drying. Total effectiveness confirmed for AC of qi stagnation-blood stasis type. Mechanistically, this formula synergistically achieves blood activation, stasis resolution, heat clearance, swelling reduction, and analgesia through its multicomponent pharmacological actions.

#### 4.5. Herbal Enema

As a traditional Chinese medical therapy, Chinese herbal retention enema involves the rectal

administration of decocted herbal formulations into the colon. This method is clinically validated not only for treating anal cryptitis but also effective against ulcerative colitis, constipation, and intestinal obstruction. Its advantages include rapid therapeutic onset, operational flexibility, and avoidance of gastric mucosal irritation, enabling immediate clinical efficacy [26].

Zhao Ximing [27] proposed that anal sinusitis arises from impaired qi-blood circulation in the perianal region and the mutual accumulation of heat and blood stasis. The treatment principles focus on promoting blood circulation, resolving stasis, clearing heat, and detoxifying. A clinical observation was conducted using Rhubarb and Moutan Decoction (Dahuang Mudanpi Tang) for enema administration. The treatment group (80 cases) received enema therapy with Rhubarb and Moutan Decoction, composed of:Dahuang granules 10 g, Peach kernel granules 10 g, Moutan bark granules 10 g,Mirabilite granules 10 g,Winter melon seed granules 10 g. Preparation: All herbs were dissolved in 100 mL of 100°C water, then allowed to cool to approximately 36.5°C before use. Procedure: Patients adopted a lateral position. A medical soft tube was inserted 5-10 cm into the rectum.50 mL of decoction was slowly injected using a syringe. Patients maintained a head-elevated/hip-lowered position for drug absorption. Administered twice daily (50 mL each session). After 1 hour, Puji Hemorrhoid Suppository coated with Jiuhua Ointment was inserted

The control group (80 cases) received 50 mL Kangfuxin Liquid rectally twice daily, followed by Compound Polymyxin B-coated Compound Carraghenates Suppository after 1 hour. Both groups received 14-day treatments. Results: Treatment group: 92.5% total effectiveness Control group: 65% total effectiveness. This demonstrates the significant efficacy of Rhubarb and Moutan Decoction for anal sinusitis. The formula employs Rhubarb and Peach Kernel as principal herbs (promoting blood circulation and purging heat), assisted by Moutan Bark (cooling blood and resolving stasis), with Mirabilite and Winter Melon Seed softening hardness and dispersing abscesses. Collectively, the formula achieves blood-activating, stasis-resolving, heat-clearing, and detoxifying effects.

Author	Year	Formula/Herbal Prescription	Administration Method	Total Sample	Treatment Group (n)	Control Group	Treatment Duration	Outcome Measure	Reference
				Size	F ()	(n)			
Lai Richang	2017	Huoxue Qingdou Formula	Oral	64	32	32	15 days	Total Effectiveness Rate	[14]
Huang Yan	2020	Self-formulated Jiedu Sanyu Decoction	Oral	120	40	80	10 days	Total Effectiveness Rate	[15]
Guo Guangli	2018	Taohong Siwu Decoction	Oral	48	48	0	20 days	Total Effectiveness Rate	[16]
He Dandan	2023	Jiedu Sanyu Decoction	Oral	98	43	55	14 days	Total Effectiveness Rate	[18]
Bian Xuechun	2021	Self-formulated Sitz Bath Formula	Sitz Bath	62	31	31	7 days	Total Effectiveness Rate	[20]
Deng Zetan	2012	Modified Taohong Siwu Decoction	Sitz Bath	188	94	94	7 days	Total Effectiveness Rate	[21]
He Zhibin	2020	Honghua Hemorrhoid Suppository	Suppository	150	75	75	30 days	Total Effectiveness Rate	[23]
Liu Jizhong	2012	Huoxue Jiedu Zhitong Suppository	Suppository	120	60	60	30 days	Total Effectiveness Rate	[24]
Cheng Limin	2020	Pugong Zhitong Ointment	Ointment	80	40	40	10 days	Symptom Score	[25]
Zhao Ximing	2019	Dahuang Mudanpi Decoction	Herbal Enema	160	80	80	14 days	Total Effectiveness Rate	[27]

Table 1. Baseline Characteristics of Study Subjects

### 5. Summary and Perspectives

Anal sinusitis falls under the category of "zang-poison" Traditional Chinese Medicine (TCM). *The Orthodox Manual of External Medicine* succinctly states the etiology: "Visceral toxin arises from excessive alcohol and rich foods, or physical overexertion, leading to accumulated toxins that flow downward and form masses in the anus"[28, 29]. This statement elucidates the pathogenesis of anal sinusitis: prolonged physical strain or indulgence in greasy/spicy diets generates damp-heat pathogens, which accumulate in the intestines and descend to the anus. This results in impaired qi-blood circulation, eventually causing blood stasis obstructing the collaterals. According to TCM theory, "obstruction leads to pain", manifesting as anal distension, pain, and related symptoms [30].

Anal sinusitis, characterized by insidious onset, recurrent episodes, and refractory progression, is recognized as a major challenge in proctology [31]. Blood stasis, as the primary pathological mechanism, obstructs local qi-blood circulation, leading to significant pain and persistently compromising patients' quality of life, which contributes to the chronicity of the disease. Additionally, recurrent inflammatory stimulation and symptoms such as distending pain often induce anxiety and depression in patients [32]. Therefore, exploring multi-modal and multi-dimensional therapeutic approaches for anal sinusitis (AC) is imperative. Professor Sun Linmei frequently incorporates liver-soothing and qi-regulating herbs (e.g., Aucklandiae Radix, Bupleuri Radix, Olibanum, Myrrha, Citri Sarcodactylis Fructus, and Aurantii Fructus Immaturus) when treating AC of the qi stagnation and blood stasis type. This approach not only addresses symptoms but also alleviates emotional disturbances, achieving satisfactory clinical efficacy. This article summarizes and analyzes TCM therapies—including oral formulas, herbal fumigation, suppositories, ointments, and herbal enemas—for AC of the qi stagnation and blood stasis type (Table 1). It confirms that the blood-activating and stasis-resolving method significantly improves clinical symptoms, enhances total effectiveness rates, and reduces recurrence. The mechanism may involve improving local microcirculation, inhibiting anal inflammation [33]. Current Research Limitations: Lack of animal experiments and insufficient exploration of pharmacological mechanisms. Most protocols rely on individual clinical experience with limited sample sizes; few multi-center, large-scale randomized controlled trials exist. Observation periods (7-30 days) are short-term, lacking long-term follow-up data to verify sustained efficacy. Current studies predominantly focus on damp-heat pathogenesis, with inadequate attention to blood stasis. Future outlook: The research should carry out animal experimental modeling of AC with qi stagnation and blood stasis type, conduct multi-center, large-sample randomized controlled trials, clarify drug targets, and standardize effective prescriptions. The research should optimize the research design and conduct dynamic efficacy evaluation through longitudinal follow-up. In clinical practice, the treatment strategy for blood stasis is given priority.

#### References

- [1] Jiang C, Lu J. Efficacy and safety of traditional Chinese medicine retention enema in the treatment of anal sinusitis: A protocol for systematic review and meta-analysis [J]. Medicine (Baltimore), 2022, 101(51): e32361.
- [2] Sun L M, Lin Y, Liu F H, et al. Orthogonal Optimization of Herbal Fumigation, Anal Dilation, and Red Light Therapy for Anal Sinusitis [J]. Henan Journal of Traditional Chinese Medicine, 2018, 38(12): 1886-1889.
- [3] Guo S Q, Yin L X, Zhang Q, et al. Visual Analysis of TCM Intervention Studies on Anal Sinusitis [J]. Journal of Traditional Chinese Medicine Information, 2023, 47(4): 110-116.
- [4] An AY (Editor). Proctology [M]. Beijing: People's Medical Publishing House, 1998.
- [5] Huang Z F. Clinical Observation on Traditional Chinese Medicine Combined with Sulfasalazine Colon-Soluble Capsules for Anal Sinusitis [D]. Guangzhou University of Chinese Medicine, 2018.
- [6] Zhang N, Zhou X L, Liu S. Effects of Modified Qingre Shenshi Decoction on Inflammatory Factors, Oxidative Stress, and Immune Function in Patients with Chronic Anal Sinusitis of Damp-Heat Downward Infusion Type [J]. Chinese Journal of Experimental Traditional Medical Formulae, 2019, 25(13): 93-98.
- [7] Ruan C W. Understanding the Anti-inflammatory Mechanism of Blood-Activating and Stasis-Resolving Therapy [J]. Modern Journal of Integrated Traditional Chinese and Western Medicine, 2008, (3): 354-355.
- [8] Huang Y. Identification, Validation, and Functional Analysis of Target Molecules in Blood Stasis Syndrome of Coronary Heart Disease [D]. China Academy of Chinese Medical Sciences, 2011.
- [9] Yan M Y, Liu R H, Liu W, et al. Professor Liu Renghai's Experience in Treating Chronic Anal Sinusitis with Spleen-Tonifying, Liver-Softening, and Turbidity-Resolving Methods Based on the "Turbid Toxin Theory" [J]. Sichuan Journal of Traditional Chinese Medicine, 2023, 41(9): 8-12.
- [10] He Y H, Ling G L (Editors). TCM Proctology [M]. Beijing: Tsinghua University Press, 2011.
- [11] Jiang W, Gu W L, Tian H X, et al. Exploring Tang Rongchuan's Experience in Diagnosing and Treating Hematochezia Based on Blood Syndrome Treatise [J]. Journal of Zhejiang Chinese Medical University, 2022, 46(1): 101-104.
- [12] Du B L, Zhong X, Zhang Y S, et al. Professor Zhang Yansheng's Differentiation and Treatment of Anal Sinusitis from the Perspective of TCM Surgery [J]. Acta Chinese Medicine and Pharmacology, 2017, 45(1): 70-72.
- [13] Zhang Z Y, Liang J H, Fei Y, et al. Data Mining-Based Analysis of Herbal Enema Prescription Patterns for Anal Sinusitis [J]. Henan Journal of Traditional Chinese Medicine, 2022, 42(1): 96-100.

- [14] Lai RC, Huang LJ. Huoxue Qingdou Formula for 32 Cases of Anal Sinusitis [J]. Chinese Medicine Modern Distance Education of China, 2017, 15(18): 99-100+118.
- [15] Huang Y, Xu A J, Liang Q S, et al. Efficacy of Self-Formulated Jiedu Sanyu Decoction in Treating Anorectal Inflammatory Diseases Based on the "Dual Treatment of Stasis and Toxin" Theory [J]. Journal of Guangxi University of Chinese Medicine, 2020, 23(4): 14-17.
- [16] Guo G L, Zhong J, Wang Y F. Modified Taohong Siwu Decoction Combined with Retention Enema for 48 Cases of Anal Cryptitis [J]. Global Traditional Chinese Medicine, 2018, (5): 20-21.
- [17] Lin Z J, Li Y M, Xie X Y, et al. Effects of Modified Taohong Siwu Decoction on Bone Repair and Hemorheology in Femoral Head Necrosis with Qi Stagnation and Blood Stasis [J]. World Chinese Medicine, 2018, 13(1): 105-108.
- [18] He D D, Li Z Y, Wang Y. Efficacy Observation of Jiedu Sanyu Decoction in 43 Cases of Anal Sinusitis [J]. Chinese Journal of Coloproctology, 2023, 43(1): 51-53.
- [19] Wang W, Chen X, Zeng B F. Clinical Efficacy of Kuhuang Lotion Sitz Bath Combined with Longdan Xiegan Decoction for Postoperative Mixed Hemorrhoids [J]. Western Journal of Traditional Chinese Medicine, 2024, 37(4): 124-127.
- [20] Bian X C, Duan W L. Efficacy Observation of Herbal Sitz Bath Combined with Jiuhua Ointment for Anal Sinusitis [J]. Journal of External Therapy of Traditional Chinese Medicine, 2021, 30(5): 30-31.
- [21] Deng Z T, Wang X L. Clinical Efficacy of Blood-Activating and Stasis-Resolving Therapy in Proctological Diseases [C]. Proceedings of the 14th National Conference on Proctology of China Association of Chinese Medicine, Changsha, Hunan, China, 2012.
- [22] Zheng J H. Study on the Medication Characteristics of Zheng's Hemorrhoid Formula [D]. Guangzhou University of Chinese Medicine, 2018.
- [23] He Z B, Shen Y L, Guo S H, et al. Effects of Honghua Hemorrhoid Suppository Combined with Anorectal Therapeutic Device on TCM Symptom Scores and Recurrence Rates in Anal Fissure and Anal Sinusitis Patients [J]. Journal of Liaoning University of Traditional Chinese Medicine, 2020, 22(7): 200-203.
- [24] Liu J Z. Clinical Observation of Huoxue Jiedu Zhitong Suppository for 60 Cases of Chronic Anal Sinusitis [J]. Hebei Journal of Traditional Chinese Medicine, 2012, 34(5): 677-678.
- [25] Cheng L M, Xiong W N, Guo Y H. Clinical Study of Pugong Zhitong Ointment for 80 Cases of Anal Sinusitis [J]. Information on Traditional Chinese Medicine, 2020, 27(4): 98-99.
- [26] Yao Y R, Tang Y B, He Y H. Prescription Patterns of Herbal Enema for Anal Sinusitis Based on TCM Inheritance Support System [J]. Hunan Journal of Traditional Chinese Medicine, 2022, 38(2): 29-33.
- [27] Zhao X M, Deng Z H, Zhao Y J. Dahuang Mudanpi Decoction Combined with Puji Hemorrhoid Suppository and Longzhi Ointment for 80 Cases of Anal Sinusitis [J]. Chinese Medicine Modern Distance Education of China, 2019, 17(7): 59-61.
- [28] Du M L, Hou F G, Shi Q, et al. Retrospective Analysis of the Effect of Jianpi Jiedu Formula on Survival Time in Advanced Colorectal Cancer Patients with Synchronous and Metachronous Metastases [J]. Journal of Traditional Chinese Medicine, 2023, 64(8): 820-826.
- [29] Chen Y J, Luo M. Differentiation and Treatment of Anorectal Diseases Based on the "Visceral Toxin" Theory in The Orthodox Manual of External Medicine [J]. Shanxi Journal of Traditional Chinese Medicine, 2023, 39(12): 1-3.
- [30] Mo D. Clinical Efficacy of Zhitong Rushing Decoction Combined with Angtai Suppository for Anal Sinusitis [J]. Journal of Clinical Rational Drug Use, 2021, 14(29): 77-79.
- [31] Qiao Z W, Wang Y, Zhang X Y. Efficacy of Modified Longdan Xiegan Decoction Combined with Compound Huangbai Liniment for Anal Sinusitis with Internal Damp-Heat Accumulation [J]. Journal of Practical Traditional Chinese Medicine, 2023, 39(3): 448-450.
- [32] Wang J, Wang L, Zhang X Y. Preliminary Exploration of Liver-Soothing and Spleen-Strengthening Therapy for Chronic Anal Cryptitis Based on the Brain-Gut Interaction Theory [J]. Chinese Journal of Coloproctology, 2020, 40(3): 57-59.
- [33] Liang Q P, Xie X Y. Effects of Zhitong Rushing Decoction (Oral and Retention Enema) on Inflammatory Markers and Pain Levels in Anal Sinusitis Patients [J]. Clinical Journal of Chinese Medicine, 2021, 13(1): 114-116.