

Review Article

Analysis on Syndrome and Treatment of Shaoyin Cold Type Acute Tonsillitis

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Abstract

Acute tonsillitis belongs to the category of "milk moth" in traditional Chinese medicine. TCM clinical syndrome differentiation is often divided into two types: wind-heat pathogens affecting the lung meridian and dietary excess leading to heat accumulation in the lungs and stomach. The author's clinical practice found that some acute tonsillitis patients are often manifested as Shaoyin cold type, and the syndrome and treatment of general acute tonsillitis are totally different. "Throat Science Family Instructions" put forward the specific treatment of pharyngeal pain is Shaoyin typhoid type, and the prescription is Banxia Gangui Decoction, which is composed of eight kinds of drugs: Guizhi, Banxia, Fuling, Jiegeng, Yiyiren, Buguzhi, Ganjiang, and Zexie. It is traditionally used to treat symptoms such as sore throat, diarrhea, deep and thin pulse, and white tongue coating without thirst. Combining theory and clinical experience, the author reports successful clinical outcomes using this decoction to treat acute tonsillitis of the Shaoyin cold type. This paper aims to analyze the internal connection between Banxia Gangui Decoction and Shaoyin cold type acute tonsillitis. The paper outlines the symptom characteristics, etiology and pathogenesis, treatment based on syndrome differentiation, differential diagnosis of this condition, along with the therapeutic rationale for Banxia Gangui Decoction. A case study is included.

Keywords

Shaoyin Cold Syndrome, Acute Tonsillitis, Banxia Gancao Decoction

1. Introduction

In traditional Chinese medicine, acute tonsillitis is categorized under "milk moth," characterized by fever, sore throat, and swollen palatine tonsils, often with yellow-white pus spots. It is believed to result from wind-heat pathogens affecting the lung meridian or from dietary excess leading to heat accumulation in the lungs and stomach. Clinically, it is classified into wind-heat in the lung meridian and lung-stomach heat accumulation types [1]. The author identi-

fied a subtype of acute tonsillitis associated with Shaoyin cold syndrome, where conventional Chinese medicine treatments are ineffective, and antibiotic or antiviral therapies provide only temporary relief, with frequent recurrences such as three to five times a year, or even five to seven times a year. This condition significantly impacts patients' daily lives. The author's clinical practice suggests that a modified Banxia Gangui Decoction, based on traditional Chinese medicine principles,

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is effective for this subtype. This report summarizes these clinical insights for peer consideration.

Symptom Characteristics: Patients with Shaoyin cold type acute tonsillitis often exhibit contradictory symptoms. While they present with fever, sore throat, and swollen tonsils, indicative of an excess condition [2], their overall state suggests deficiency, with fatigue, lack of energy, pale complexion, low voice, shortness of breath, dry mouth without thirst, or preference for warm drinks, loose stools, and clear, prolonged urination. The tongue may appear pale red or dark red with a thin white or slightly greasy coating, and the pulse is typically deep, thin, and weak [3]. Symptoms may improve with rest,

but are often unresponsive to anti-inflammatory or heat-clearing medications. According to the "Cold Damage", Shaoyin syndrome is characterized by a faint and thin pulse and a tendency to sleep. This reflects heart and kidney yang deficiency and internal cold, leading to a lack of vitality [4]. The primary diagnostic indicators for this condition are fatigue and a faint, thin pulse. Locally, tonsils may be significantly swollen with mild congestion and thin white purulent secretions, with relatively mild pain. Laboratory tests often show no significant changes in white blood cell count or C-reactive protein levels.



Figure 1. Local morphology and color of tonsil in Shaoyin cold type acute tonsillitis.



Figure 2. Morphology and color of tongue and tongue coating in Shaoyin cold type acute tonsillitis.

Etiology and Pathogenesis: In recent years, urbanization has led to a lifestyle where young people often engage in late-night activities, whether for work or entertainment, resulting in depletion of kidney essence and eventual kidney deficiency. The consumption of cold and grilled foods further depletes the body's yang qi. The widespread use of air conditioning makes individuals more susceptible to cold pathogens. Typically, these pathogens invade the body through the skin. When the body's vital energy is strong, the cold remains on the surface, leading to a struggle between the body's defenses and the pathogen, manifesting as Taiyang cold syndrome. [5] Taiyang and Shaoyin are interconnected; when kidney yang is deficient and unable to resist pathogens, cold can penetrate beyond the surface and directly affect the Foot Shaoyin Kidney Meridian, resulting in Shaoyin cold syndrome. [6] "Foot Shaoyin kidney Meridian, from the kidney through the liver, diaphragm, into the lung, throat..." [7] Normally, the essence and qi of the kidney ascend through the meridian to nourish

the tonsils, providing immune function and blocking external pathogens. When the Foot Shaoyin is affected by cold, the cold contracts and stagnates, causing the essence and qi to condense into dampness and phlegm, accumulating in the throat, leading to swelling of the palatine tonsils [8]. Cold-damp obstructs the pathways, meridians are not running smoothly, causing yang qi to stagnate and transform into heat, leading to congested and swollen tonsils, and in severe cases, tissue decay and pus formation, causing acute tonsillitis [9].

Treatment based on syndrome differentiation: Treatment for Shaoyin cold type acute tonsillitis often involves warming the meridians to dispel cold, transforming phlegm, and relieving throat pain. Once phlegm is resolved and cold is dispersed, the meridians are unblocked, and heat is relieved, resolving acute tonsillitis [10]. As stated in Zhang Xugu's "Essence of Cold Damage": "The Shaoyin meridian runs directly through the throat; when external pathogens invade, yang cannot extend, leading to heat and throat pain. Using

warm methods to disperse the pathogens allows internal heat to dissipate, treating the root cause. Cold treatments for throat pain can trap pathogens, worsening the condition [11]." Banxia Gangui Decoction, from "Throat Science Family Instructions," is indicated for Shaoyin cold syndrome, sore throat, diarrhea, deep and thin pulse, and white tongue coating without thirst. The formula consists of eight traditional Chinese medicines, with a balanced composition. Banxia dries dampness and transforms phlegm as the principal; Guizhi warms the meridians and assists Banxia as the minister. Yiyiren and Fuling strengthen the spleen and drain dampness; Zexie clears heat and reduces turbidity. Ganjiang warms the middle and unblocks the meridians; Buguzhi warms the kidney and consolidates qi. Jiegeng ventilates the lung and benefits the throat. Together, the formula warms yang, dispels cold, transforms phlegm, and relieves throat pain. Once the cold pathogen in the Foot Shaoyin Kidney Meridian is eliminated, the phlegm-dampness in the throat is transformed, the meridians are unblocked, heat is dissipated, and acute tonsillitis is resolved [12].

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Differential Diagnosis: Clinically, Shaoyin cold type acute tonsillitis must be differentiated from damp-heat accumulation type acute tonsillitis. Patients with damp-heat type also experience mild sore throat, fatigue, deep pulse, pale and swollen tongue, and greasy coating. However, damp-heat has characteristics like persistent body heat, foul breath, sticky mouth, fullness in the chest, nausea, heaviness in the limbs, lack of appetite, sticky stools, and scanty yellow urine. The tongue edges are red, with a yellow greasy coating, and the pulse is soft. Local examination shows swollen tonsils with yellow-white purulent coating, and in severe cases, secretions cover the pharyngeal wall and arches. In contrast, Shaoyin cold type patients have fever without sweating, bland taste, normal bowel movements, or loose stools and clear urination, pale red tongue, thin white coating, and deep pulse. The etiology and pathogenesis differ, as do the treatment principles and prescriptions, requiring careful differentiation in clinical practice.



Figure 3. Local morphology and color of tonsil in damp-heat accumulation type acute tonsillitis.



Figure 4. Morphology and color of tongue and tongue coating in damp-heat accumulation type acute tonsillitis.

2. Case Presentation

Case Study

Patient: Zhou, Female, 34 years old

Address: 47 Xixingyuan, Liangxi District

Outpatient Number: 0804808667

Initial Consultation Date: November 2, 2020

Onset Season: Frost's Descent

Chief Complaint: Sore throat for 4 days.

History of Present Illness: The patient experienced a sore

throat 4 days ago following fatigue, accompanied by a mild fever (37.4 °C), without chills, nasal congestion, and runny nose. She was treated with intravenous piperacillin-tazobactam, which initially improved her sore throat. However, after discontinuing the medication for 2 days, the sore throat returned, leading her to seek treatment at our hospital. Currently, the sore throat worsens with eating, and she experiences dry mouth without a desire to drink, although drinking warm water provides relief. She does not have a cough or sputum production. Local Examination: The pharyngeal mucosa is congested, and the tonsils are enlarged to

grade 2 with congestion and swelling. The epiglottis is normal. General Condition: The patient is easily fatigued, has an average appetite, light sleep with frequent awakenings, and experiences unformed stools 2-3 times per day. Urination is

normal. The tongue is pale red and swollen with a white, slightly greasy coating. The pulse is wiry and thin. Laboratory Tests: White Blood Cell count: $5.05 \times 10^9/L$, Neutrophils: 48.80%, C-reactive protein: 4.52 mg/L.



Figure 5. Morphology and color of tonsil, tongue, tongue coating before treatment.

Treatment based on syndrome differentiation: The patient is identified with a generalized deficiency of yang energy and weak external defenses, making them susceptible to cold pathogens, which can penetrate the Shaoyin meridian. This meridian passes through the throat, where cold can obstruct the pathways and inhibit the flow of yang energy. As stagnation occurs, it transforms into heat, causing the tonsils to become inflamed and painful. The minor deficiency in Shaoyin yang results in the patient feeling fatigued, with a weak and fine pulse, and experiencing restless sleep with frequent awakenings. Additionally, the deficiency in spleen and kidney yang manifests as a reduced appetite, frequent unformed bowel movements (2-3 times daily), while urination remains normal. The absence of any internal excess heat is reflected in a pale red tongue with a thin white, moist coating.

Traditional Chinese Medical Diagnosis: Acute tonsillitis (characterized by Shaoyin cold syndrome and phlegm accumulation in the throat).

Treatment Principles: To counteract these symptoms, the approach involves warming the kidneys to expel cold, transforming phlegm, improving circulation, and alleviating throat pain.

Prescription: A modified granular formulation of Banxia Gangui Decoction, including Guizhi 6 g, Banxia 6 g, Fuling 10 g, Jiegeng 6 g, Yiyiren 10 g, Buguzhi 10 g, Ganjiang 3 g, Zexie 10 g, and Gancao 6 g. This is prepared into three doses, dissolved in water, and administered orally.

External treatment: Detumescence Powder applied to the throat three times daily to reduce swelling.

Further visit on November 9, 2020: The patient demonstrated improved vitality, normalized body temperature, resolution of sore throat, with regular bowel movements and urination. Clinical examination revealed that the congestion and swelling of the tonsils had resolved, the epiglottis appeared normal, and there was a red tongue with a thin white coating and a deep pulse pattern.



Figure 6. Morphology and color of tonsil, tongue, tongue coating after treatment.

3. Discussion

In traditional Chinese medicine, the diagnostic process integrates four methods: observation, listening/smelling, inquiry, and palpation. However, clinicians sometimes encounter

situations where the pulse findings do not align with the clinical symptoms, or vice versa. It is essential to accurately distinguish between the pulse and symptomatology to guide treatment decisions, sometimes prioritizing the pulse over the symptoms or the other way around [13]. As noted in the Shaoyin chapter of the "Cold Damage" (Section 92): "If a

patient presents with persistent fever, headache, and a deep pulse, along with body aches, the treatment should focus on the interior using Sini Decoction." This approach emphasizes the significance of the deep pulse. Qing dynasty scholar He Mengyao observed: "When pulse and symptoms are incongruent, one must be genuine while the other is false, necessitating careful differentiation. For instance, external irritability and heat with a weak pulse suggest deficiency heat [14]..." In the presented case, the patient's pulse and symptoms were not aligned. The sore throat, fever, and swollen tonsils suggested an excess heat condition; however, the overall presentation indicated a deficiency cold state, characterized by fatigue, loose stools, a weak and thin pulse, and a tendency to sleep. Thus, the treatment strategy should focus on the pulse, addressing the deficiency cold. Previously, oral antibiotics and heat-clearing detoxifying Chinese medicines did not alleviate the symptoms. The use of Banxia Gancao Decoction, which warms yang, dispels cold, transforms phlegm, and alleviates throat pain, was consistent with the underlying pathophysiology, resulting in the resolution of fever and sore throat [15]. As Qing dynasty scholar You Zaiqing remarked: "When Shaoyin is invaded by external pathogens, they accumulate in the throat, unable to exit or enter. If treated with cold, the accumulation worsens; if treated with pungent warmth, the stagnation is resolved [16]."

4. Conclusion

Acute tonsillitis is a common disease in otorhinolaryngology. Shaoyin cold type acute tonsillitis is quite different from general heat type acute tonsillitis, and the nature of prescription medication is often opposite. In clinical diagnosis, it is necessary to find out the differences from the symptoms such as sore throat and fever, so as to target the pathogenesis and accurately administer the medicine.

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Conflicts of Interest

The authors declare no conflicts of interest.

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