

# Core Pathogenesis and Medication Approach for Treating Peripheral Facial Paralysis Based on the Theory of Fundamental Qi Disorder

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**Abstract:** *Peripheral facial paralysis (PFP), also known as idiopathic facial nerve palsy or Bell's palsy, is a common neurological disorder in clinical practice. Its core clinical manifestation is the sudden paralysis of the unilateral facial expression muscles. Traditional Chinese medicine (TCM) generally classifies this condition under the category of "wry mouth" (kou pi), and the primary clinical treatment often involves dispelling wind and unblocking the collaterals. However, in actual practice, it has been observed that relying solely on the method of dispelling wind and unblocking collaterals often yields unsatisfactory results. This article provides an in-depth analysis of the core pathogenesis of peripheral facial paralysis and aims to offer a new theoretical perspective and clinical rationale for TCM syndrome differentiation and treatment of peripheral facial paralysis, thereby helping to improve clinical therapeutic outcomes.*

**Keywords:** Fundamental qi disorder, Peripheral facial paralysis, Core pathogenesis, Xiaoxuming Decoction, Medication approach.

## 1. Introduction

Peripheral facial paralysis is an acute-onset peripheral nerve disease. Epidemiological data indicate that the incidence of facial paralysis ranges from 11.5 to 53.3 per 100,000 population [1]. The onset of the disease is very sudden. Patients usually present with symptoms of unilateral facial expression muscle paralysis within a short period. Modern medicine holds that a substantial body of research has identified viral infection as a significant trigger for peripheral facial paralysis [2]. The pathogenesis also involves ischemic edema of the facial nerve and compression within the bony facial nerve canal. Conventional clinical treatment typically employs a combined regimen of glucocorticoids, antiviral agents, and neurotrophic medications. Despite this approach, approximately 15% to 20% of patients fail to achieve full recovery due to delayed treatment or inappropriate therapeutic strategies [3].

TCM has recognized this disease for over two thousand years.

As early as in the Huangdi Neijing (Yellow Emperor's Inner Classic), there are records of "wry mouth" (kou pi) and "sudden wry mouth." The chapter Lingshu: Jingjin states: "The sinew of the foot yangming... its disease... sudden wry mouth. In acute cases, the eyes cannot close; in heat patterns, the sinews become slack and the eyes cannot open. When the cheek sinews are affected by cold, they contract and pull the cheek, causing deviation of the mouth; when affected by heat, the sinews relax and cannot contract, thus resulting in deviation" [4]. Traditional Chinese medicine, particularly the fundamental qi disorder theory, offers considerable advantages in treating peripheral facial paralysis.

## 2. Origin and Core Connotation of the Fundamental Qi Disorder Theory

### 2.1 Theoretical Origin

The ideological source of the "fundamental qi disorder" theory can be traced back to the Huangdi Neijing. The Suwen:

Pingre Bing Lun states: "When pathogens gather, the qi must be deficient" [5]. The Lingshu: Baibing Shisheng also mentions: "Wind, rain, cold, and heat cannot harm a person alone without deficiency. If one encounters fierce wind and rain suddenly yet does not fall ill, it is because there is no deficiency, hence pathogens cannot harm the person alone. It must be that a deficient pathogenic wind and the person's body, both in a state of deficiency, combine to allow lodging of the pathogen in the body" [4].

During the Jin-Yuan period, Li Dongyuan, building upon the healthy qi theory of the Huangdi Neijing and integrating his own clinical experience, explicitly introduced the concept of "fundamental qi disorder" for the first time. In Yixue Faming: Zhongfeng, he wrote: "The Neijing states: 'The qi of man can be likened to the swift wind of heaven and earth.' Therefore, wind stroke is not due to external wind pathogen but a disease of the fundamental qi itself. Generally, individuals over forty years of age with qi decline are prone to this disease, while it does not occur during one's prime. If a person is obese, they might occasionally experience it, which is likewise a case of a robust physique with qi decline" [6].

From the Qing Dynasty to the Republic of China period, Peng Ziyi, on the foundation of inheriting Li Dongyuan's spleen-stomach theory and integrating the circular motion theory, further systematized and expanded the fundamental qi disorder theory. In the chapter Shibing Benqi Pian (Seasonal Diseases and Fundamental Qi) of Circular Motion in Ancient Chinese Medicine, he pointedly criticized: "Those who have historically discussed seasonal diseases have all believed that external seasonal pathogens invade the human body and cause disease, completely disregarding that it is the body's own fundamental qi that becomes disordered. In studying medicine and treating diseases, one must first exhaustively apply the concept of 'ascertaining the basis.' If a seasonal disease is identified as being caused by seasonal atmospheric pathogens invading the human body, the medication used will inevitably aim to expel the seasonal qi. Medicines that expel seasonal qi are precisely those that damage and consume the body's fundamental qi. Once the fundamental qi is damaged, the

disease will inevitably worsen... If one ascertains that seasonal diseases are caused by a disorder of the body's fundamental qi, then the medication used will aim to harmonize the body's fundamental qi" [7]. He stressed that the essence of TCM treatment lies in harmonizing the body's own fundamental qi, allowing the circular motion of the body to return to normal, rather than simply expelling external pathogens.

## 2.2 Core Connotation

The core connotation of this theory can be summarized into three aspects, all of which highly correspond to the clinical characteristics of peripheral facial paralysis:

First, healthy qi is the root, while external pathogens are the branch. The fundamental qi refers to the healthy qi of the human body, including original qi, pectoral qi, nutritive qi, and defensive qi, serving as the material basis and motivational source for sustaining life activities. The fundamental qi disorder theory holds that the occurrence of any disease is premised on a deficiency of the body's healthy qi; only when healthy qi is insufficient can external pathogens invade and cause illness. As the renowned senior TCM practitioner Li Ke stated: "All diseases arise because this thing (original qi) has changed. Regardless of how much external interference one encounters, in your specific body, it will first manifest as damage to the part where the original qi is altered" [8].

Second, if the fundamental qi becomes dysfunctional, all diseases may arise. The normal movement of fundamental qi is the essential guarantee for maintaining health. When the fundamental qi is deficient or its movement becomes abnormal, the body's yin-yang balance is disrupted, visceral functions become dysfunctional, and the metabolism of qi, blood, and body fluids becomes disordered, consequently leading to various ailments. Peng Ziyi employed circular motion as a metaphor to describe the movement of the body's fundamental qi, viewing the vital activities of the human body as a state of dynamic equilibrium involving "the rotation of the middle qi and the ascending-descending movement of the four dimensions" [7]. If the middle qi is damaged and its ascending-descending function becomes abnormal, the balance of the circular motion is disrupted, and various diseases will subsequently emerge.

Third, treating disease requires seeking the root and harmonizing the fundamental qi. Based on the fundamental qi disorder theory, the fundamental principle of TCM in treating disease is "treating disease by seeking the root," which means harmonizing the body's innate fundamental qi and restoring its normal operational state, thereby achieving the goal of expelling pathogens and curing the disease. The focus of treatment should not be on simply expelling external pathogens, but rather on supporting healthy qi and harmonizing the fundamental qi.

## 3. Analysis of the Core Pathogenesis of Peripheral Facial Paralysis Based on the Fundamental Qi Disorder Theory

Based on the fundamental qi disorder theory and combined

with long-term clinical observation, we hold that the core pathogenesis of peripheral facial paralysis is a pattern of root deficiency and branch excess: root deficiency refers to the deficiency of the body's healthy qi, while branch excess refers to the invasion of wind-cold pathogens and the obstruction of qi and blood in the channels and collaterals. A clear causal relationship and evolutionary pattern exist among these three elements, collectively forming the complete pathological chain of the disease's occurrence and development.

### 3.1 Deficiency of Fundamental Qi Is the Root Cause of Disease Onset

Deficiency of the body's fundamental qi is the most fundamental internal cause for the onset of peripheral facial paralysis. Li Dongyuan held that the qi dynamic of the human body is analogous to the swift wind phenomenon of heaven and earth, and that wind stroke is not caused by an external wind pathogen but results from an internal qi dynamic disorder [9]. The physiological functions of original qi are mainly to propel and warm. It stimulates the growth, development, and reproduction of the human body; warms and activates the physiological functions of various visceral organs and tissues; and serves as the motive force for human life activities [10]. The face, situated at the upper part of the body, pertains to the yang position and depends on the warming and propelling action of yang qi. The spleen and stomach are the source of yang qi generation and ascent. If the spleen-stomach yang qi is deficient, the body's overall yang qi will be insufficient, causing the face to lose warmth and its external defensive function to decline. Clinical observations have found that most patients with peripheral facial paralysis present with signs of spleen-stomach yang qi deficiency, such as aversion to cold, cold extremities, mental fatigue, poor appetite, a pale tongue with white coating, and a deep, thready pulse.

Modern medical research has also confirmed that the occurrence of peripheral facial paralysis is closely correlated with a decline in the body's immunity. When the body's immunity decreases, viruses like herpes simplex virus and varicella-zoster virus, which remain latent in the geniculate ganglion of the facial nerve, become activated and replicate extensively, triggering an inflammatory reaction and edema in the facial nerve, resulting in compression within the bony facial nerve canal. This leads to ischemia and hypoxia, ultimately precipitating the disease. This aligns perfectly with the TCM theory that deficiency of the fundamental qi, insufficiency of healthy qi, and weakness of the defensive exterior underlie the condition.

### 3.2 Invasion of External Pathogens Is the Branch Aspect of Disease Onset

On the foundation of spleen-stomach yang qi deficiency and weakened defensive exterior, if the body is exposed to external pathogens such as wind-cold, wind-heat, or wind-dampness—especially wind-cold pathogen—these external pathogens will directly invade the three yang channels of the face, leading to obstruction of channel qi, impeded circulation of qi and blood, failure to nourish the sinews and vessels, and flaccidity of the muscles, consequently causing facial paralysis.

Cold possesses the characteristics of contraction and stagnation, and it most readily damages the body's yang qi. If the face is suddenly attacked by wind-cold pathogen—for example, by sleeping facing the wind, prolonged exposure to air conditioning or a fan, or catching a chill after getting wet in the rain—it will lead to spasm of the facial channels and vessels, stagnation of qi and blood, and ischemia and edema of the facial nerve, thereby inducing the disease. Clinically, we have found that the incidence of this disease markedly increases during winter and spring when temperatures suddenly drop. In summer, as people remain in air-conditioned rooms for extended periods with their faces directly stimulated by cold wind, this season has also become a high-incidence period for the disease.

### 3.3 Obstruction of Channels and Collaterals Is the Outcome of Disease Onset

Under the combined effect of fundamental qi deficiency and external pathogen invasion, the flow of qi and blood in the facial channels and collaterals becomes unsmooth, leading to blockage and obstruction. The sinews and vessels lose nourishment, and the muscles become flaccid and unable to contract, thus giving rise to a range of clinical symptoms such as deviation of the mouth and eyes. This represents the final pathological outcome of the disease.

The foot yangming stomach channel courses along the frontal aspect of the face, and its branches cover almost all facial expression muscles, hence the saying “yangming governs the face.” The hand shaoyang triple energizer channel and the foot shaoyang gallbladder channel course along the lateral side of the face, closely relating to the functions of the eyelids, mouth angle, and other areas. When wind-cold pathogen invades the facial channels and collaterals, it first causes channel qi obstruction, impairs the normal flow of qi and blood, and results in facial muscle paralysis due to loss of nourishment.

If the disease persists without resolution and the impeded flow of qi and blood continues for an extended period, it will give rise to internal static blood and phlegm turbidity obstruction, forming a pathological state of phlegm-stasis binding. The combination of phlegm and stasis further intensifies the channel and collateral obstruction, making the condition more complex and refractory. At this stage, it is imperative to simultaneously boost qi, invigorate blood, transform phlegm, and expel stasis to achieve a relatively good therapeutic effect.

## 4. Medication Approach for Peripheral Facial Paralysis Based on the Fundamental Qi Disorder Theory

Drawing on the above analysis of the core pathogenesis, the basic treatment principle for peripheral facial paralysis is: primarily supporting healthy qi, secondarily dispelling pathogens, harmonizing the fundamental qi, and unblocking the channels and collaterals. In terms of specific medication, flexible modifications should be made according to different disease stages and syndrome patterns.

### 4.1 Composition of Xiaoxuming Decoction

Xiaoxuming Decoction is derived from Sun Simiao's Beji Qianjin Yao Fang (Essential Formulas Worth a Thousand Gold Pieces for Emergencies) and is a classic formula for treating wind stroke. It possesses the effects of dispelling wind and dissipating cold, boosting qi and nourishing blood, and warming the channels and unblocking the collaterals. In the Essential Formulas, this formula consists of twelve medicinals: Mahuang (Ephedrae Herba), Guizhi (Cinnamomi Ramulus), Renshen (Ginseng Radix et Rhizoma), Gancao (Glycyrrhizae Radix et Rhizoma), Ganjiang (Zingiberis Rhizoma), Shaoyao (Paeoniae Radix), Chuanxiong (Chuanxiong Rhizoma), Xingren (Armeniacae Semen Amarum), Fangfeng (Saposhnikoviae Radix), Huangqin (Scutellariae Radix), Fangji (Stephaniae Tetrandrae Radix), and Fuzi (Aconiti Lateralis Radix Praeparata) [11]. Its compatibility characteristics perfectly match the core pathogenesis of peripheral facial paralysis, namely “root deficiency and branch excess.”

In this formula, Mahuang, Guizhi, Fangfeng, and Fangji are the primary medicinals for dispelling wind and scattering pathogens. They can dissipate wind-cold, remove dampness, and unblock the collaterals, chiefly targeting the branch excess aspect of the disease. Fuzi and Ganjiang warm yang and dissipate cold, unblock impediments and relieve pain, warming and tonifying the spleen and kidney yang, thus addressing the root deficiency of the disease. Renshen and Gancao boost qi, fortify the spleen, and consolidate healthy qi, cultivating and supplementing the postnatal foundation and strengthening the body's disease resistance. Chuanxiong, Shaoyao, and Xingren nourish and invigorate the blood, soften the sinews and unblock the collaterals, thereby improving facial blood circulation and nourishing the nerves and muscles. Huangqin clears and resolves constrained heat and restrains the dry nature of warm, hot medicinals such as Fuzi and Ganjiang. This imparts the whole formula with the characteristic of combining cold and heat, applying both supplementation and purgation, so that it is warm without causing dryness and scatters without damaging healthy qi.

The essence of the compatibility of Xiaoxuming Decoction lies in “supporting healthy qi to dispel pathogens, and dispelling pathogens to stabilize healthy qi.” The formula not only contains a significant number of wind-dispelling and pathogen-scattering medicinals to treat the branch, but also includes medicinals that warm yang and boost qi to consolidate the root, fully embodying the core thought of the fundamental qi disorder theory, “treating disease by seeking the root.” Modern pharmacological research indicates that Xiaoxuming Decoction has multiple actions, including anti-inflammatory effects, detumescence, improving microcirculation, nourishing nerves, and regulating immunity. It can intervene in the pathological process of peripheral facial paralysis from multiple links, which is also a significant reason for its marked clinical efficacy.

### 4.2 Staged Medication Approach

According to the disease course and pathogenesis evolution characteristics of peripheral facial paralysis, we divide it into three stages: the acute stage, recovery stage, and sequelae stage. The emphasis of pathogenesis differs at each stage, and consequently, the medication should be adjusted accordingly.

#### 4.2.1 Acute Stage (1–7 days after onset)

The pathogenesis characteristic of this stage is fundamental qi deficiency with initial invasion of wind-cold, leading to a struggle between the healthy qi and the pathogen. The clinical presentation includes sudden deviation of the mouth and eyes, incomplete eyelid closure, accompanied by aversion to cold, fever, headache, postauricular pain, a pale tongue with thin white coating, and a floating tight pulse—a wind-cold exterior syndrome pattern.

Treatment at this stage should principally warm yang to release the exterior and support healthy qi to dispel pathogens, using a modification of Xiaoxuming Decoction. Commonly used medicinals: Mahuang 6g, Guizhi 9g, Fangfeng 12g, Fangji 9g, prepared Fuzi 6g (decocted first for 30 minutes), Ganjiang 6g, Renshen 12g, Zhigancao (honey-fried *Glycyrrhizae Radix*) 6g, Chuanxiong 9g, Baishao (*Paeoniae Radix Alba*) 12g, Xingren 9g, Huangqin 6g. Modifications: If the patient presents with exterior deficiency and spontaneous sweating, remove Mahuang and add Huangqi (*Astragali Radix*) 20g and Baizhu (*Atractylodis Macrocephalae Rhizoma*) 12g. If postauricular pain is severe, add Chaihu (*Bupleuri Radix*) 9g and Gegen (*Puerariae Lobatae Radix*) 15g. If headache is prominent, add Baizhi (*Angelicae Dahuricae Radix*) 12g and Qianghuo (*Notopterygii Rhizoma et Radix*) 9g.

#### 4.2.2 Recovery Stage (8 days–3 months after onset)

The pathogenesis characteristic of this stage is the gradual retreat of external pathogens, pronounced fundamental qi deficiency, and worsening of channel and collateral stasis obstruction. Clinically, although the deviation of the mouth and eyes has somewhat improved, signs such as incomplete eyelid closure, mouth angle deviation, facial numbness, mental fatigue, pale tongue with white coating, and a thready, weak pulse may still be present.

This stage represents the optimal period for promoting nerve function recovery. Treatment should focus primarily on boosting qi and invigorating blood, unblocking the collaterals and stopping spasms. The formula used is Xiaoxuming Decoction with Mahuang and Guizhi removed, and the addition of Huangqi 30g, Danggui (*Angelicae Sinensis Radix*) 12g, Dilong (*Pheretima*) 9g, Quanxie (*Scorpio*) 3g, and Jiangcan (*Bombyx Batryticatus*) 9g. Modifications: If qi deficiency is severe, increase the dosage of Renshen and Huangqi to 30g each. If blood deficiency is obvious, add Shudihuang (*Rehmanniae Radix Praeparata*) 15g and Heshouwu (*Polygoni Multiflori Radix*) 15g. If blood stasis is severe, add Taoren (*Persicae Semen*) 9g and Honghua (*Carthami Flos*) 9g. If facial twitching occurs, add Tianma (*Gastrodiae Rhizoma*) 9g and Gouteng (*Uncariae Ramulus cum Uncis*) 12g (added later).

#### 4.2.3 Sequelae Stage (more than 3 months after onset)

The pathogenesis characteristic of this stage is severe fundamental qi deficiency, phlegm-stasis binding, and serious channel and collateral obstruction. Clinically, it manifests as prolonged deviation of the mouth and eyes, accompanied by facial muscle spasm, synkinesis, facial muscle atrophy, a

pale-dark tongue or one with stasis macules, white greasy coating, and a wiry, rough pulse.

Treatment at this stage should primarily aim to boost qi and nourish blood, transform phlegm and expel stasis, and unblock the collaterals to stop spasms. The formula used is a modification combining Xiaoxuming Decoction with Qianzheng Powder and Buyang Huanwu Decoction. Commonly used medicinals: Renshen 15g, Huangqi 60g, Danggui 12g, Chuanxiong 9g, Baishao 12g, prepared Fuzi 6g, Ganjiang 6g, Quanxie 5g, Jiangcan 9g, Wugong (*Scolopendra*) 2 pieces, Taoren 9g, Honghua 9g, Dilong 9g, Banxia (*Pinelliae Rhizoma*) 9g, Chenpi (*Citri Reticulatae Pericarpium*) 9g. Modifications: If facial muscle spasm is severe, increase Baishao to 30g and add Gancao 6g. If muscle atrophy is present, add Lujiaojiao (*Cervi Cornus Colla*) 9g (melted) and Guibanjiao (*Testudinis Carapax et Plastrum Colla*) 9g (melted). If marked aversion to cold is present, add Rougui (*Cinnamomi Cortex*) 6g and Wuzhuyu (*Evodiae Fructus*) 3g.

The condition in the sequelae stage is relatively complex and more challenging to treat, necessitating long-term adherence to therapy. Simultaneously, comprehensive treatment modalities such as acupuncture, tuina, and physical therapy can be integrated. The traction effect induced by negative pressure during cupping can also effectively stimulate the facial nerves and promote the relief of facial paralysis [12], thereby further enhancing clinical efficacy.

## 5. Discussion and Prospects

This study, grounded in Li Dongyuan's fundamental qi disorder theory, has conducted an in-depth exploration of the core pathogenesis and clinical medication approach for peripheral facial paralysis. Based on this pathogenesis view, we have established the treatment principle of "primarily supporting healthy qi, secondarily dispelling pathogens, harmonizing the fundamental qi, and unblocking the channels and collaterals," and advocate using Xiaoxuming Decoction as the foundational formula for staged syndrome differentiation and treatment. Compared with the traditional method of solely dispelling wind and unblocking collaterals, this therapeutic approach places greater emphasis on restoring the body's own healthy qi, aligning with the fundamental TCM ideology of "treating disease by seeking the root."

Admittedly, this study has certain limitations. First, this study is primarily a theoretical discussion and clinical experience summary, lacking large-sample, multi-center, randomized controlled clinical trials to validate its efficacy. Second, the modern scientific connotation of the fundamental qi disorder theory has not yet been fully elucidated, and the specific mechanisms underlying Xiaoxuming Decoction's treatment of peripheral facial palsy warrant further, more in-depth investigation. In the future, we will carry out more clinical and experimental studies to further verify the effectiveness of the fundamental qi disorder theory in treating peripheral facial paralysis, explore its mechanisms of action, and thereby provide a more scientific theoretical basis and practical guidance for the TCM treatment of this condition.

In summary, the fundamental qi disorder theory offers a new

theoretical perspective and clinical approach for the TCM syndrome differentiation and treatment of peripheral facial paralysis. In clinical practice, we should consistently adhere to the “human-centered” philosophy, value the role of the body’s own healthy qi, take harmonizing the fundamental qi as the core, and integrate syndrome differentiation and treatment to achieve superior clinical outcomes.

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