

## **Auricular Acupressure Guided by Syndrome Differentiation for Refractory Lagophthalmos After Facial Paralysis: A Nursing Case Study**

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### **Abstract**

The pathogenesis of intractable lagophthalmos is predominantly attributed to relative internal deficiency of vital qi with concurrent invasion of wind-cold pathogenic factors affecting the head and facial region, resulting in malnourishment of the meridians, or alternatively, induced by factors including excessive emotional disturbances, trauma, surgery, intoxication, metabolic disturbances, nutritional deficiencies, and immune dysfunction. This paper summarizes the application of auricular acupressure technique in traditional Chinese medicine through syndrome differentiation-based acupoint selection, employing pressure stimulation at points including Mouth, Eye, Cheek, Shenmen, Liver, Heart, Kidney, and Ear Apex to enhance neural excitability, improve local blood circulation and nutritional metabolism, and accelerate the restoration of local muscular and neurological function.

### **Full Text**

#### **Preamble**

#### **Auricular Point Sticking Under Syndrome Differentiation Guidance for Refractory Eyelid Closure Insufficiency After Facial Paralysis: A Case Report**

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## Abstract

Refractory eyelid closure insufficiency most commonly arises from relative deficiency of healthy qi internally, invasion of wind-cold pathogenic factors affecting the head and face leading to malnourishment of the meridians, or from extreme emotional disturbances, trauma, surgery, poisoning, metabolic disorders, nutritional deficiencies, and immune dysfunction. This paper summarizes the application of auricular point sticking, a traditional Chinese medicine technique, through syndrome differentiation-based point selection. By applying pressure to stimulate points such as Mouth, Eye, Cheek, Shenmen (Spirit Gate), Liver, Heart, Kidney, and Ear Apex, this approach enhances neural excitability, improves local blood circulation and nutritional metabolism, and accelerates recovery of local muscle and nerve function.

**Keywords:** Auricular point sticking; Facial paralysis; Eyelid closure insufficiency; Syndrome differentiation-based nursing; Traditional Chinese medicine nursing

Facial paralysis falls under the categories of “Wai Pian,” “Wai Xie,” “Kou Wai Pian,” and “Diao Xian Feng” in traditional Chinese medicine. Eyelid closure insufficiency refers to a group of symptoms characterized by difficulty completing opening and closing eye movements, primarily involving abnormal muscle strength of the orbicularis oculi, and represents a common accompanying symptom of facial paralysis [1]. Epidemiological surveys indicate that at least 3.35 million people develop facial paralysis annually in China [2]. Eyelid closure insufficiency secondary to facial paralysis causes significant inconvenience to patients and predisposes them to exposure keratoconjunctivitis, corneal ulcers, and other complications, severely impacting quality of life and psychological well-being. This case involved a patient with refractory eyelid closure insufficiency caused by facial paralysis following resection of a left cerebellopontine angle lipoma. With a postoperative period of two years, the patient had already passed the golden window for rehabilitation, increasing the difficulty of treatment.

Auricular point sticking is an external therapy that involves applying Vaccaria seeds to auricular points with appropriate kneading, pressing, pinching, and compression to generate stimulatory sensations such as soreness, numbness, distension, and pain for therapeutic purposes [3]. Through syndrome differentiation-based point selection, this case effectively improved the patient’s eyelid closure insufficiency. This method offers advantages of simple operation, rapid onset, minimal adverse effects, and cost-effectiveness [4]. Clinical cases utilizing traditional Chinese medicine external therapies alone for eyelid closure insufficiency are relatively rare; we hereby summarize our nursing experience as follows.

## 1 Clinical Data

The patient was a 32-year-old female who presented to our hospital's Traditional Chinese Medicine Nursing Clinic on February 21, 2023, with a two-year history of left eyelid closure insufficiency and recent onset of right eyelid closure insufficiency over the preceding two days, seeking rapid recovery through traditional Chinese medicine external therapies. Symptoms included: clear consciousness, fair spirit, no deviation of the mouth corner, bilateral eyelid closure insufficiency, decreased vision, poor appetite and sleep, red tongue with thin white coating, and a wiry, slippery pulse.

**Traditional Chinese Medicine Diagnosis:** Facial paralysis (qi deficiency and blood stasis pattern)

**Western Medicine Diagnosis:** Facial neuritis; Status post left cerebellopontine angle lipoma resection

**Past Medical History:** Left cerebellopontine angle lipoma resection two years prior; no history of food or drug allergies.

During treatment at the Traditional Chinese Medicine Nursing Clinic, the patient received no auxiliary pharmacotherapy or other traditional Chinese medicine external treatments besides auricular point sticking. Based on the patient's condition, combined with tongue and pulse findings, and comprehensive analysis of the four diagnostic methods, bilateral auricular point sticking was administered. Each point was pressed 20 times per session for 3 minutes, with pressure applied until the patient experienced soreness, distension, and pain sensations. The auricular patches were replaced every three days. Continuous stimulation was applied for 13 days starting February 21, 2023, with each three-day period constituting one treatment course. After seven days of treatment, the patient could achieve complete eyelid closure with effortful eye closure; after 13 days, both eyes could close completely with gentle closure, and slight eyebrow elevation was possible with minimal effort, indicating satisfactory recovery of facial nerve function. Follow-up via WeChat was conducted at 15, 30, and 45 days after completion of four treatment courses, revealing no recurrence of symptoms and significant relief of eyelid closure insufficiency, with high patient satisfaction regarding nursing outcomes.

### 2.1.1 Comprehensive Analysis of the Four Diagnostic Methods

**Observation:** Clear consciousness, fair spirit; thin body build, normal complexion; red tongue with thin white coating

**Auscultation and Olfaction:** Clear, fluent speech with normal voice; no abnormal odors detected

**Inquiry:** Palpitations, eyelid closure insufficiency; poor appetite, normal bowel and urination; normal hearing, bitter taste in mouth; poor sleep, normal memory; has given birth to two children, normal menstrual cycle

**Palpation:** Wiry, slippery pulse

## House-Brackmann Facial Nerve Function Grading Scale

Grade	Score	Facial Muscle Movement and Symmetry
I	0	Normal function, symmetrical facial muscles
II	1	Mild facial muscle weakness, slight asymmetry with effortful smiling
III	2	Obvious facial muscle weakness, incomplete eyelid closure with effort
IV	3	Severe facial muscle weakness, incomplete eyelid closure even with effort
V	4	Complete facial paralysis, slight movement at mouth corner
VI	5	Complete facial paralysis, no movement

Note: Lower scores indicate less facial nerve injury.

## Self-Rating Anxiety Scale (SAS)

Item	None or Rarely	Sometimes	Most of
1. I feel more nervous and anxious than usual			
2. I feel worried for no reason			
3. I easily become upset or feel panicked			
4. I feel as if my body is falling apart, fragmented			
5. I feel everything is going smoothly, nothing unlucky will happen			
6. My limbs tremble and shake			
7. I suffer from headaches, neck pain, and back pain			
8. I feel weak and easily fatigued			
9. I feel calm and can sit quietly			
10. I feel my heart beating faster			
11. I feel dizzy from time to time			
12. I have episodes of feeling faint			
13. I have difficulty with inhalation and exhalation when breathing			
14. My fingers and toes feel numb and tingling			
15. I suffer from stomach pain and indigestion			
16. I have to urinate frequently			
17. My hands are always warm and dry			
18. My face feels hot and flushed			
19. I fall asleep easily and rest well at night			
20. I have nightmares			

**Scoring and Interpretation:**

1. Rating uses a 1-4 scoring system.
2. Sum the scores of all 20 items to obtain the total score, multiply by 1.25,

and round to the nearest integer to obtain the standard score.

3. The cutoff value for anxiety assessment is 50 points: 50-59 indicates mild anxiety, 60-69 indicates moderate anxiety, and 70+ indicates severe anxiety. Higher scores indicate more pronounced anxiety tendencies.

## 2.2 Nursing Diagnoses

1. **Disturbed Body Image** related to eyelid closure insufficiency and facial disfigurement.
2. **Anxiety** related to concerns about disease prognosis and heart-kidney disharmony due to chronic illness damaging yin.
3. **Disturbed Sleep Pattern** related to anxiety and apprehension.

## 2.3 Nursing Plan

Auricular point sticking based on syndrome differentiation was implemented. Each auricular point was pressed 20 times daily for 3 minutes per session until the patient experienced soreness, distension, and pain sensations. Auricular patches were replaced every three days, with each three-day period constituting one treatment course, aiming to improve eyelid closure insufficiency, alleviate psychological burden, and achieve rehabilitation goals.

### 2.4.1 Auricular Point Sticking

(1) **Point Selection Protocol:** Mouth, Eye, Cheek, Shenmen (Spirit Gate), Liver, Heart, Kidney, Ear Apex.

(2) **Rationale for Point Selection:**

Mouth, Eye, and Cheek are selected as corresponding regional points. Regional point selection involves choosing auricular points that correspond to the diseased body parts and represents the primary principle in treatment.

Shenmen: Supplements heart qi and calms the spirit.

Liver: The eyes open into the liver, and the liver governs emotional regulation.

Heart and Kidney: Chronic illness damages yin, leading to heart-kidney disharmony.

Ear Apex: Clears heat, drains fire, brightens vision, and alleviates pain.

(3) **Point Location:** Referenced to *National Standard of the People's Republic of China GB/T13734-2008: Nomenclature and Location of Auricular Points* [5].

(4) **Auricular Examination:**

1) **Inspection:** Under natural light, examine the ears for any lesions, including abnormal skin color, elevations or depressions, vascular engorgement, nodular protrusions, or bran-like scaling [6].

2) **Palpation:** Press each point sequentially to identify tender or sensitive areas.

**(5) Operation Method:** Assist the patient to a seated position. Identify corresponding points on both ears. Cut adhesive tape into 0.5 cm<sup>2</sup> squares, attaching one Vaccaria seed to the center of each. Clean and disinfect the auricle and surrounding skin. Using a probe, locate the center of each point and apply the adhesive accurately to the auricular point, pressing firmly for a moment. Apply to both ears simultaneously, ensuring secure adhesion. Instruct the patient to press each point 3-4 times daily using thumb-finger opposition with rotational pressure, 20 times per point per session for 3 minutes, until soreness, distension, and pain sensations are elicited. Replace every three days.

**(6) Nursing Care for Auricular Point Sticking:** Before point selection, inquire about adhesive and alcohol allergies and comprehensively assess the patient's auricular skin condition. During treatment, advise the patient to keep the auricle dry and avoid water exposure; the ear may be covered with plastic wrap during showering. If the patient experiences itching, pain, or other discomfort during the embedding period, remove the patches immediately.

## 2.5.2 Objective Indicators

### (1) Facial Nerve Function Score

After four auricular point sticking treatments, the patient demonstrated normal bilateral eyelid closure activity, with only slightly looser left eyelid closure compared to the right during forceful eye closure. The House-Brackmann (H-B) scale score decreased from Grade IV to Grade II, indicating significant improvement in eyelid closure insufficiency and near-complete recovery, with no adverse events during treatment.

#### House-Brackmann Facial Nerve Function Assessment Record

Date	Grade	Score	Facial Muscle Movement
2023.2.21 (Initial)	IV	3	Severe facial muscle weakness, incomplete eyelid closure with effort
2023.2.24 (First)	IV	3	Severe facial muscle weakness, incomplete eyelid closure with effort
2023.2.27 (Second)	III	2	Obvious facial muscle weakness, incomplete eyelid closure with effort
2023.3.2 (Third)	II	1	Mild facial muscle weakness, complete eyelid closure with effort
2023.3.5 (Fourth)	II	1	Mild facial muscle weakness, complete eyelid closure with gentle effort

### (2) Anxiety Score

After four treatments, the patient's anxiety was alleviated. The SAS score decreased from 62 points (moderate anxiety) to 46 points, with improved mood and increased confidence in overcoming the disease.

This case demonstrates that intervention with auricular point sticking as a standalone traditional Chinese medicine nursing technique effectively improved refractory eyelid closure insufficiency caused by facial paralysis, alleviated psychological burden, resolved anxiety, and enhanced the patient's confidence in recovery. Through post-treatment follow-up via WeChat and emphasis on the necessity of continued treatment, the patient maintained weekly treatment sessions for nearly two months with consistent follow-up, showing no symptom exacerbation.

#### 4.1 Mechanism of Auricular Point Action

Traditional Chinese medicine holds that the ear is where qi, blood, and meridians converge. Modern medical research indicates that abundant neural tissue distributed on the ear establishes connections with corresponding neurons upon stimulation, blocking original pathological afferent impulses through sensory thresholds [7-8]. From the perspective of biological holography, physiological and pathological information from all body parts can be reflected on the ear. When disease occurs, auricular point sticking stimulates reactive points on the ear to exert therapeutic effects [9]. The *Lingshu · Kouwen* also records: "The ear is where all the ancestral vessels gather" [10]. Combined with the four diagnostic methods, syndrome differentiation-based selection of auricular points and continuous stimulation with Vaccaria seeds achieves the goal of disease improvement. The *Huangdi Neijing* elaborates on the circulation of the twelve meridians, with the six yang meridians entering the ear, ascending anterior to the ear, or reaching the superior angle of the ear. Although the six yin meridians do not directly connect to the ear, they can indirectly ascend to the ear through their divergent branches merging with yang meridians. Therefore, auricular point sticking can effectively alleviate somatic symptoms and improve treatment outcomes [11].

#### 4.2 Rationale for Point Selection

According to the *Diagnostic and Therapeutic Criteria of Traditional Chinese Medicine Diseases and Syndromes* issued by the State Administration of Traditional Chinese Medicine in 2012 [12], this patient presented with a disease course exceeding two years, eyelid closure insufficiency, poor appetite and sleep, red tongue with thin white coating, and wiry, slippery pulse. Based on comprehensive analysis of the four diagnostic methods, the pattern was differentiated as "qi deficiency and blood stasis." Related research indicates [13] that positive reactive auricular points in facial neuritis patients include: Eye, Cheek, Temple, Forehead, Jaw, Anterior Ear Lobe, Mouth, Shenmen, Liver, Endocrine, Heart, Kidney, Sympathetic, Ear Apex, etc. Among these, Mouth, Eye, and Cheek correspond to facial organs affected by facial paralysis, aligning with the "holographic law of point distribution." The human body is an organic whole; emotional distress can cause dysfunction of zang-fu organ qi mechanisms, leading to blockage of facial meridians. The heart stores the spirit and governs

life activities; Shenmen is the gate of the original spirit that governs thoughts, consciousness, and emotions, hence selecting Heart and Shenmen. The kidney stores essence and governs qi reception; the liver stores blood and governs free coursing. When qi deficiency and blood stasis occur, the liver and kidney are responsible, hence selecting Liver and Kidney.

Facial neuritis, also known as facial nerve palsy, is a common clinical condition representing facial muscle paralysis due to facial nerve damage. Modern medicine commonly uses corticosteroids, antiviral drugs, and vitamins to combat inflammation and suppress immune responses, but these show limited efficacy for chronic sequelae of facial neuritis and carry significant toxic side effects with long-term use. Traditional Chinese medicine offers characteristic external treatments such as auricular therapy, acupuncture, and tuina massage. Among these, auricular point sticking is more widely used clinically due to its simplicity, good efficacy, low cost, and minimal adverse effects, making it readily accepted by patients. This case utilized modern medical perspectives primarily from neural system theory, holographic biology, and traditional Chinese medicine's meridian transmission and zang-fu organ regulation to understand auricular points, achieving satisfactory therapeutic results through syndrome differentiation-based point selection and precise treatment, effectively improving patient quality of life and nursing satisfaction, warranting clinical promotion and application.

**Patient Informed Consent:** Publication of this case report was approved with informed consent from the patient and family.

**Conflict of Interest Statement:** The authors declare no conflicts of interest.

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