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Modified Shengmai Yin Decoction for Treating Dysphagia Due to Bulbar Paralysis

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Abstract

Dysphagia due to bulbar paralysis is a challenging issue in neurology. Professor Zhou Shaohua, through studying ancient medical texts and drawing on years of clinical experience, has employed the method of nourishing "Qi", nurturing the heart, and controlling saliva, using modified Shengmai Yin Decoction to treat dysphagia caused by bulbar paralysis with remarkable efficacy.

Keywords

Dysphagia due to bulbar paralysis
Shengmai Yin decoction
Typical medical case
Review

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1. Background

Professor Zhou Shaohua, a researcher, chief physician, and postdoctoral supervisor, is a member of the Chinese Academy of Chinese Medical Sciences Committee. He is one of the 500 renowned senior TCM experts nationwide and serves as a mentor for the academic inheritance of outstanding senior TCM experts. With extensive clinical experience in neurology, he specializes in the TCM treatment of difficult and severe cases in neurology. He has developed various new neurology drugs and widely applied them in clinical practice, earning him the Science and Technology Progress Award from the National Administration of Traditional Chinese Medicine and the Special Government Allowance from the State Council.

Dysphagia due to bulbar paralysis encompasses both true and pseudobulbar paralysis and is one of the challenging issues in neurology. It is present in various conditions such as stroke, multisystem atrophy, motor neuron disease, cranial trauma, Parkinson's disease, and others. Dysphagia is one of the most common complications following brain injury [1]. Symptoms such as drooling, coughing after swallowing, inability to swallow, abnormal coughing, swallowing pain, difficulty in articulation, as well as complications like aspiration, pulmonary infection, malnutrition, and asphyxia, severely impact patients' quality of life and survival, and may even lead to death [2,3]. There have been numerous studies on dysphagia in clinical practice, but the anatomical basis in the brain responsible for dysphagia remains uncertain. It is now known that damage to the swallowing center in the medulla oblongata can result in irreversible swallowing dysfunction. Based on further understanding of brain

functional areas through functional magnetic resonance imaging, it has been discovered that swallowing movements activate not only the medulla oblongata but also the dominant cerebral hemisphere, indicating that the completion of swallowing movements requires the coordinated effort of multiple brain regions to achieve the desired effect [4,5].

Bulbar paralysis dysphagia falls within the scope of traditional Chinese medicine conditions such as "aphonia and paralysis", "pseudo-dysphagia", and "laryngeal obstruction". Mr. Zhou applied the method of nourishing "Qi", nurturing the heart, and controlling salivation, using a modified Shengmai Decoction to treat 26 cases of bulbar paralysis dysphagia, all achieving significant results. Among these cases, there were 16 cases of true bulbar paralysis and 10 cases of pseudobulbar paralysis; 7 cases of cerebral infarction, 8 cases of amyotrophic lateral sclerosis, 6 cases of multisystem atrophy, 3 cases of traumatic brain injury, and 2 cases of Parkinson's disease. Mr. Zhou primarily used a combination of Shengmai Decoction with Inula Flower and Roasted Loquat Leaf, with modifications based on individual cases. In Shengmai Decoction, *Ophiopogon japonicus* targets the heart, lungs, and stomach, promoting fluid production, nourishing "Qi", and nurturing "Yin"; *Schisandra chinensis* targets the heart, lungs, and kidneys, astringing and consolidating, nourishing "Qi", promoting fluid production, and calming the kidneys and heart; Inula Flower is salty and warm, primarily lowering "Qi", resolving phlegm, descending "Qi", and promoting water circulation; Roasted Loquat Leaf targets the lungs and stomach, clearing heat and resolving phlegm, descending stomach heat, and having antiemetic effects, resolving phlegm and reversing "Qi" [6]. Combined with individualized medication based on syndrome differentiation, all patients experienced varying degrees of relief from symptoms such as dysphagia, choking on water and food, and excessive salivation. A typical case analysis is presented below:

2. Case 1

2.1. First consultation

Mr. Liu, male, aged 75, presented on March 19, 2013. He had suffered from cerebral infarction for 1.5 years, with brain MRI showing multiple bilateral cerebral infarctions. Post-treatment, he was left with dysphagia, choking on water and food, indistinct speech, right-sided hemiplegia, accompanied by dry mouth, poor appetite, urinary incontinence, skin itching, and other symptoms. He had been unable to eat for the past two days and was unable to walk when he came for consultation, being wheeled in on a chair. He appeared fatigued, lethargic, irritable, with a low and unclear voice, exhibiting pathological laughter and crying. He had a gastric tube inserted through his nose, with tongue contraction, a red tongue with scanty coating and yellow and putrid root, and a thin and wiry pulse. The syndrome was differentiated as "Qi" and "Yin" deficiency, with phlegm stagnation, dampness obstruction, and internal heat.

2.1.1. Treatment

Nourishing "Qi" and "Yin", resolving phlegm and harmonizing the stomach, and clearing dampness and heat. The modified Shengmai Decoction was used. The prescription is as followed, 10 g of raw ginseng, 12 g of *Ophiopogon japonicus*, 6 g of *Schisandra chinensis*, 10 g of roasted loquat leaf, 10 g of inulae flower (wrapped), 10 g of *Pinellia ternata*, 10 g of *Adenophora stricta*, 10 g of *Anemarrhena asphodeloides*, 10 g of *Acorus tatarinowii*, 30 g of charred three immortals, 12 g of *Scutellaria baicalensis*, 10 g of *Kochia scoparia*, 10 g of *Dictamni cortex*, and 10 g of roasted licorice. 14 doses, to be decocted in water and taken once daily.

2.2. Second consultation on April 2, 2013

The patient was able to eat two days after taking the medication, but experienced choking cough. The gastric tube had been removed. Speech remained unchanged, with skin itching, urinary incontinence, dry mouth, coughing, and a reversed day-night rhythm. The tongue was red with a thin coating, and the pulse was wiry and thin. As the treatment was effective, the same prescription was continued with the addition of 10 g of curcuma, 0.1 g of cultivated bezoar (to be taken with water), 10 g of dried tangerine peel, 10 g of *Cnidium monnieri*, and 12 g of *Forsythia suspensa*. 14 doses, to be decocted in water and taken once daily.

2.3. Third consultation on April 16, 2013

The patient's spirit had improved compared to before, with a louder but still indistinct voice. Difficulty

swallowing persisted, with excessive salivation and choking when drinking water or eating. Skin itching had decreased. The tongue was red with a thin, white coating, and the pulse was slow with irregularities. The diagnosis was deficiency of both the heart and kidneys, with phlegm obstructing the clear orifices.

2.3.1. Treatment

Nourish "Qi" and the heart, warm "Yang" and tonify the kidneys, and resolve phlegm and reverse "Qi". The modified Shengmai Decoction combined with the Yougui Decoction was used. Prescription includes 10 g of raw ginseng, 12 g of *Ophiopogon japonicus*, 6 g of *Schisandra chinensis*, 10 g of inulae flower (wrapped), 10 g of roasted loquat leaf, 10 g of prepared aconite (decocted first), 30 g of *Rehmannia glutinosa* (cooked), 10 g of *Dendrobium nobile*, 10 g of *Cornus officinalis*, 6 g of cinnamon, 10 g of *Cistanche deserticola*, 10 g of *Morinda officinalis*, 30 g of *Poria cocos*, 10 g of curcuma, 10 g of *Alpinia oxyphylla*, 10 g of oyster shell, and 30 g of *Astragalus membranaceus*. 30 doses, to be decocted in water and taken once daily.

2.4. Fourth consultation on May 21, 2013

The patient's swallowing had significantly improved, with no choking when eating food but occasional choking when drinking water. Speech was clearer and more forceful, allowing for communication. There was excessive salivation, cold legs, a dark red tongue with a thin, white coating, and an irregular pulse. The diagnosis remained the same, with slight adjustments to the prescription: *Rehmannia glutinosa* (cooked) was replaced with 30 g of *Rehmannia glutinosa* (raw), cinnamon was replaced with 10 g of cassia twig, and 0.1 g of cultivated bezoar (to be taken with water), 10 g of *Eucommia ulmoides*, and 15 g of achyranthes bidentata were added. 30 doses, to be decocted in water and taken once daily.

Follow-up in September revealed significant improvement in the patient's symptoms. The patient could eat foods like steamed buns and only occasionally choked when drinking water quickly. Speech was clearer than before, with no other discomfort. The same modified prescription was continued.

2.5. Commentary

This patient is a stroke victim who falls under the category of pseudobulbar palsy. The patient is an elderly male with a syndrome characterized by deficiency of both "Qi" and "Yin", with phlegm-dampness transforming into heat and infiltrating the skin. Mr. Zhou prescribed Sheng Mai "Yin" (a formula to replenish "Qi" and nourish "Yin"), combined with roasted loquat leaves and inula flower to descend "Qi", resolve phlegm, and harmonize the stomach, supplemented with herbs to clear heat and eliminate dampness.

Additionally, he included *Adenyophora* root, *Anemarrhena rhizome*, and roasted licorice to nourish the stomach "Yin" and boost stomach "Qi". Although the formula may appear simple, it yielded remarkable effects. The patient was able to eat within two days, and after one month of treatment, the gastric tube was removed. The original formula was adjusted with the addition of herbs to invigorate the spleen and kidney, resolve phlegm, and induce resuscitation based on the patient's symptoms. As a result, the patient's choking cough significantly improved, he became more energetic, his speech became clearer, and his skin itching subsided. For this patient with a complex condition, all symptoms were relieved in a short period, an effect attributed to Mr. Zhou's skill in formulating prescriptions that focused on the primary syndrome while safeguarding the overall condition, using medications that were both gentle and effective.

3. Case 2

3.1. First consultation

Patient Li, female, 25 years old, presented on March 26, 2013. The patient suffered from a car accident on September 26, 2012, resulting in contusions and lacerations of the brain and brainstem, leading to coma. After treatment, she was left with unclear speech, tongue contraction, choking when drinking water, difficulty swallowing, and could only consume semi-liquid food. She also had difficulty holding objects with her hands and experienced muscle atrophy in both hands. Upon presentation, she had a dull facial expression, was emaciated, had unclear speech, drooled, had difficulty eating and choking, trouble falling asleep, and restless sleep. Her tongue was thin and contracted, with a red tip

and yellow, scanty coating, and her pulse was wiry, thin, and rough. The syndrome was differentiated as deficiency of both "Qi" and "Yin", with phlegm obstructing the meridians.

3.1.1. Treatment

Replenishing "Qi" and nourish "Yin", resolve phlegm, and restore speech. The formula used was Sheng Mai Yin modified. Th prescription was as follows. Raw ginseng 10 g, *Ophiopogon root* 12 g, *Schisandra* fruit 6 g, roasted loquat leaves 10 g, *Pinellia tuber* 10g, tangerine peel 10 g, poria 30 g, *Arisaema* with bile 10 g, bamboo shavings 10 g, immature bitter orange 10 g, white aconite root 6 g, sweetflag rhizome 10 g, turmeric tuber 10 g, *Gastrodia tuber* 10 g, earthworm 10 g, safflower 12 g. Seven doses, decocted in water and taken once daily.

3.2. Second consultation on April 2, 2013

After taking the above medication, the patient's speech became clearer than before, her tongue movement became more flexible, her facial expression became slightly richer, and her drooling decreased. She felt drowsy and fell asleep slightly faster, but her sleep remained restless. Her tongue was red with a yellow coating, and her pulse was wiry and thin. The differentiation remained the same as before, and the above formula was slightly adjusted by adding 10 g of silkworm, 0.1 g of cultivated ox bile for oral administration, and 0.1 g of musk for oral administration. Twenty-one doses, decocted in water and taken once daily.

3.3. Third consultation on April 23, 2013

The choking cough improved, speech became slightly clearer, sleep quality enhanced, involuntary laughter persisted, tongue contraction reduced, the patient appeared overweight with a red tongue, thin yellow coating, and a thin, wiry pulse. The previous prescription was modified by removing *Arisaematis rhizoma* (Dan Xing) and adding 12 g of *Atractylodis macrocephalae rhizoma praeparatum* (Chao Bai Zhu). Twenty-eight doses were prescribed, to be taken as one decoction per day.

3.4. Fourth consultation on May 21, 2013

Speech became noticeably stronger and clearer, eating returned to near normal, choking on water significantly improved, mouth ulcers developed, difficulty falling asleep at night, bowel movements occurred every two days without dry stool, red tongue with a thin yellow coating, and a thin, wiry pulse. Syndrome was differentiation as deficiency of both "Qi" and "Yin", with phlegm transforming into heat.

3.4.1. Treatment

Replenishing "Qi" and nourishing "Yin", clearing heat, and resolving phlegm. The formula used was Sheng Mai Yin with added herbs for nourishing "Yin" and clearing heat. The prescription was as follows. 10 g of *Ginseng radix et rhizoma rubra* (Sheng Shai Shen, decocted separately), 12 g of *Ophiopogonis radix* (Mai Dong), 6 g of *Schisandrae chinensis fructus* (Wu Wei Zi), 10 g of *Scrophulariae radix* (Xuan Shen), 10 g of *Asparagi radix* (Tian Dong), 30 g of *Salviae miltiorrhizae radix et rhizoma* (Dan Shen), 30 g of *Ziziphi spinosae semen* (Suan Zao Ren), 20 g of *Poria cum radix niuxi* (Fu Shen), 10 g of *Platycladi cacumen* (Bai Zi Ren), 30 g of *Rehmanniae radix* (Sheng Di), 12 g of *Angelicae sinensis radix* (Dang Gui), 10 g of *Acori tatarinowii rhizoma* (Chang Pu), 10 g of *Curcumae radix* (Yu Jin), 30 g of *Gypsum fibrosum* (Shi Gao), 6 g of *Coptidis rhizoma* (Huang Lian), 10 g of *Zaocys dhumnades* (Wu She Rou), 10 g of *Pheretima* (Di Long), 10 g of *Notopterygii rhizoma et radix* (Qiang Huo), 10 g of *Clematidis radix et rhizoma* (Wei Ling Xian), and 0.1 g of Cultivated *Calculus bovis* (Ti Wai Pei Zhi Niu Huang, taken separately). Twenty-one doses were prescribed, to be taken as one decoction per day.

3.5. Fifth consultation on June 18, 2013

The choking cough eased, eating returned to normal, speech was clear, sleep was normal, weakness in the left hand was noted, red tongue with a thin white coating, and a deep, thin pulse. Syndrome was differentiation as phlegm and blood stasis obstructing the meridians, with internal stirring of liver wind. Treatment focused on resolving phlegm and unblocking the meridians, calming the liver, and suppressing wind. The formula used was Jie Yu Dan combined with Tao Hong Si Wu Tang with modifications. The prescription was as follows, 10 g of *Typhonii radix* (Bai Fu Zi, decocted first), 10 g of *Bombyx batryticatus* (Jiang Can), 10 g of *Curcumae radix* (Yu

Jin), 10 g of *Gastrodiae rhizoma* (Tian Ma), 10 g of *Acori tatarinowii rhizoma* (Chang Pu), 10 g of *Notopterygii rhizoma et radix* (Qiang Huo), 10 g of *Persicae semen* (Tao Hong), 10 g of *Carthami flos* (Hong Hua), 12 g of *Angelicae sinensis radix* (Dang Gui), 10 g of *Chuanxiong rhizom*a (Chuan Xiong), 10 g of *Paeoniae radix rubra* (Chi Shao), 30 g of *Rehmanniae radix* (Sheng Di), 0.1 g of Cultivated *Calculus bovis* (Ti Wai Pei Zhi Niu Huang, taken separately), 0.1 g of Moschus (She Xiang, taken separately), 30 g of *Salviae miltiorrhizae radix et rhizoma* (Dan Shen), and 10 g of *Glycyrrhizae radix et rhizoma* (Gan Cao). Thirty doses were prescribed, to be taken as one decoction per day.

3.6. Commentary

This patient, a young female, suffered from brain and brainstem injuries due to trauma, presenting with coexisting pseudobulbar palsy and true bulbar palsy. Prolonged trauma led to phlegm obstruction and blood stasis, which over time depleted "Qi" and consumed "Yin", resulting in a deficiency of both "Qi" and "Yin". Combining disease differentiation with syndrome differentiation, Master Zhou prescribed Sheng Mai Yin combined with *Eriobotryae folium* (Zhi Pi Ye) to replenish "Qi" and nourish "Yin", and reinforced the formula with Wendan Tang and Chang Pu Yu Jin Tang to enhance the ability to resolve phlegm and open the orifices, supplemented with *Carthami flos* (Hong Hua) and *Pheretima* (Di Long) to promote blood circulation and unblock the meridians. After three months of treatment, the choking cough eased, eating returned to normal, mental acuity improved, speech became clear, and sleep was peaceful and uninterrupted.

4. Case 3

4.1. First consultation

Mr. Lin, male, aged 52, first consulted on December 25, 2012. The patient had experienced weakness in both lower limbs accompanied by muscle atrophy for one year, with the left lower limb being more severely affected. He also presented with dysarthria, dysphagia, and was diagnosed with motor neuron disease at Xuanwu Hospital. He reported that his symptoms had gradually worsened since March 2012. Upon consultation, he exhibited weakness in both lower limbs, difficulty in climbing stairs with the left lower limb, inability to lift the left foot, slurred speech, dysphagia, choking when drinking or eating, muscle twitching, occasional sweating (more pronounced on the head), normal bowel and bladder functions, atrophy and tremor of the tongue muscles, a dark red tongue with a thin yellow coating, and a deep, wiry, and thin pulse. It was differentiated as deficiency of "Qi" and blood, decline of the heart, spleen, and kidney.

4.1.1. Treatment

Nourishing "Qi" and "Yin", warming and tonifying the spleen and kidney. Formula used was Shengmai Decoction combined with Yougui Decoction and Simiao Pills. The prescription was as follows, *Codonopsis pilosula* 12 g, *Ophiopogon japonicus* 12 g, *Schisandra chinensis* 6 g, *Prepared aconite* 10 g (decocted first), Cassia twig 10 g, *Rehmannia glutinosa* 30 g, *Cornus officinalis* 10 g, *Eucommia ulmoides* 12 g, *Cuscuta chinensis* 10 g, Deer Antler Glue 10 g (dissolved), *Angelica sinensis* 12 g, *Lycium barbarum* 10 g, *Achyranthes bidentata* 15 g, Fried *Atractylodes macrocephala* 12 g, *Poria cocos* 30 g, *Licorice* 10 g, *Atractylodes lancea* 10 g, *Phellodendron amurense* 10 g, *Dioscorea septemlobata* 10 g, *Astragalus membranaceus* (roasted) 30 g, *Paeonia lactiflora* 10 g, *Pheretima* 10 g, *Placenta hominis* 10 g. 30 doses, decocted in water and taken once daily.

4.2. Second consultation

January 29, 2013. Sweating reduced, other symptoms remained largely unchanged. The tongue was dark red with a thin white coating, and the pulse was deep and wiry. Differentiation remained the same. The same formula was continued, with the addition of Scolopendra 3 g. 30 doses, decocted in water and taken once daily.

4.3. Third consultation on February 26, 2013

Dysphagia and choking reduced, thighs became thinner, walking became strenuous. The tongue was red with a thin white coating, and the pulse was deep and thin. It was differentiation as deficiency of both "Qi" and "Yin", insufficient kidney "Yang". Treatment was conducted by nourishing "Qi" and "Yin", warming "Yang" and tonifying the kidney, strengthening tendons and bones. Formula includes Shengmai Decoction combined

with Jianbu Huqian Pills and Simiao Powder, with modifications. Prescription: Ginseng 10 g, *Ophiopogon japonicus* 12 g, *Schisandra chinensis* 6 g, *Eucommia ulmoides* 12 g, *Cynomorium songaricum* 10 g, *Cistanche deserticola* 10 g, *Dioscorea septemlobata* 10 g, *Atractylodes lancea* 10 g, *Phellodendron amurense* 6 g, *Coix lacryma-jobi* 15 g, *Achyranthes bidentata* 10 g, *Astragalus membranaceus* 30 g, *Polygonatum sibiricum* 30 g, *Cornus officinalis* 10 g, *Morinda officinalis* 12 g, *Gastrodia elata* 10 g, *Pheretima* 10 g, Donkey-Hide Gelatin 10 g (dissolved), Deer Antler Glue 10 g (dissolved), Licorice 10g. 30 doses, decocted in water and taken once daily.

4.4. Four consultation on March 26, 2013

The patient experienced relief from dysphagia, without coughing during eating, occasional difficulty in speaking, no shortness of breath, weakness in both lower limbs, a thinner left leg, muscle twitching, a cold sensation in the left leg, tongue muscle atrophy with fasciculations, a red tongue with a yellow and greasy coating, and a wiry pulse. Syndrome was differentiation as blood deficiency with wind agitation, spleen deficiency with phlegm accumulation, and insufficient kidney "Yang".

4.4.1. Treatment

Nourish blood and calm wind, strengthen the spleen and resolve phlegm, warm "Yang" and nourish the kidney. Formula used was Modified Jianbu Huqian Wan combined with Simiao San and Jieyu Dan. Prescription was as follow. *Atractylodes* 12 g, *Atractylodes macrocephala* 12 g, *Phellodendron* 10 g, Coix seed 15 g, *Achyranthes bidentata* 10 g, Chinese yam 15 g, *Angelica sinensis* 15 g, White peony root 20 g, *Gastrodia elata* 10 g, Earthworm 10 g, *Cynomorium songaricum* 10 g, *Cistanche deserticola* 10 g, *Eucommia ulmoides* 12 g, *Rhizoma typhonii* 10 g, *Bombyx batryticatus* 10 g, *Acorus gramineus* 10 g, *Curcuma longa* 10 g, *Dioscorea septemloba* 10 g. 30 doses, decocted in water and taken once daily.

4.5. Commentary

This patient is a middle-aged male diagnosed with motor neuron disease, specifically true bulbar palsy. In traditional Chinese medicine, it falls under the category of "aphonia and paralysis", presenting with symptoms such as dysphagia, coughing during eating, tongue muscle atrophy, fasciculations, and weakness in the left foot, accompanied by fatigue, perspiration on the head. The syndrome differentiation is deficiency of "Qi" and blood, with decline in the heart, liver, spleen, and kidney. The treatment aims to tonify "Qi", strengthen the spleen, generate fluids, warm and tonify the spleen and kidney, and strengthen tendons and bones. The formula combines Shengmai Yin with Yougui Wan and Simiao San, with the addition of animal-derived ingredients like placenta (Ziheche) to enhance the warming effect on the muscles. After three months of adjusted treatment, the "Yang" "Qi" was restored, "Qi" and blood became abundant, dysphagia and coughing during eating were alleviated, and the mental state also improved.

5. Discussion

Dysphagia falls under categories such as "laryngeal obstruction", "esophageal stricture", "aphonia and paralysis", and "tongue stiffness". "Lingshu · Chapter 69 on Melancholy and Speechlessness" states, "The throat is the pathway for water and grain; the larynx is where "Qi" ascends and descends; the epiglottis is the gateway for sound... the uvula is the barrier for sound; the nasopharynx is where "Qi" is dispersed; the hyoid bone is controlled by the spirit and governs tongue movement". This is the earliest record elaborating on the structure and function of the tongue and pharynx. Yu Chang, in "Medical Door Laws", emphasized, "Humans are formed by "Qi"; it is only through "Qi" that form is created. When "Qi" gathers, form exists; when "Qi" disperses, form perishes. The relationship between "Qi" and form was indeed significant", highlighting the crucial role of "Qi" in maintaining bodily functions. As stated, all five internal organs are rooted in the heart and connected to the tongue through the meridians, with the "Yin" and "Yang" "Qi" of the hands and feet also connecting to the tongue. As Fu Naihan of the Qing Dynasty discussed in the preface to "Tongue Coating Compendium": The tongue cover serves as the general messenger for all the five internal organs and six visceral organs. For instance, the heart's orifice opens to the tongue; the stomach and pharynx connect to the tongue above; the spleen's

meridian runs along the base of the tongue; the heart's meridian is attached to the root of the tongue; the spleen's collateral vessels are linked to the sides of the tongue; and the collateral vessels of the kidney and liver also ascend to connect with the base of the tongue. "Ling Shu" states: The tongue is the organ of the heart. Therefore, those with heart disease exhibit symptoms such as a curled and shortened tongue and a flushed complexion. When the heart "Qi" is harmonious, the tongue can discern tastes. When a person bites their own tongue, it is due to the upward flow of stagnant "Qi", with the meridian "Qi" reaching the tongue. When the "Qi" of the Shaoyin meridian reaches, it leads to tongue biting. "Su Wen" states: When the heart's pulse is forceful, firm, and long, it indicates a disease characterized by a curled tongue and inability to speak. Qiao Yue states: When the heart's vitality is exhausted, the tongue cannot retract and speech becomes impossible. When the tongue frequently becomes numb without apparent cause, it should not be hastily treated as wind pathology. Instead, it is due to a deficiency of heart blood, explaining the mechanism of dysphagia as stemming from a stiff tongue that cannot push and transport food. From the perspective of root deficiency and branch excess, Teacher Zhou summarized the views of historical medical experts, believing that the "root deficiency" in dysphagia is caused by a deficiency of "Qi" and blood, insufficient containment of "Qi", and impaired transportation and transformation, primarily centered on the heart and involving the liver, spleen, and kidneys. The "branch excess" refers to pathological products such as wind, fire, phlegm, and blood stasis. Therefore, we can conclude that "Qi" deficiency leading to loss of containment, counterflow of "Qi" and blood, intermingling of phlegm and blood stasis, ascending to the base of the tongue, obstructing the tongue's orifices, and impairing the function of the throat and tongue result in dysphagia [7,8].

Shengmai Drink, also known as Shengmai Powder, originates from Li Dongyuan's "Differentiation and Treatment of Internal and External Injuries". It consists of 1.5 g each of ginseng and *Ophiopogon japonicus*, along with seven *Schisandra* berries. This formula is used to treat summer heatstroke and depletion of "Qi" and body fluids, presenting symptoms such as sweating, restlessness and thirst, shortness of breath, fatigue, and a weak pulse. It is also indicated for the late stage of warm febrile diseases, where both "Qi" and body fluids are depleted, presenting symptoms such as shortness of breath, limb weakness, sweating, thirst, a pale or red tongue, and a thin and weak pulse. Additionally, it is used for chronic cough due to lung deficiency, presenting symptoms such as dry cough without phlegm, shortness of breath, excessive sweating, dry mouth and throat, and a thin and rapid pulse. This formula is a commonly used and effective prescription in clinical practice, widely applied in modern times for conditions such as coronary heart disease, low blood pressure, iron-deficiency anemia, tachycardia, bradycardia, sick sinus syndrome, atrioventricular block, and others, all yielding satisfactory results. There are also reports of its application in dementia and constipation, but its use in treating dysphagia due to bulbar paralysis has not been reported. In recent years, Teacher Zhou has achieved significant therapeutic effects in treating dysphagia due to bulbar paralysis using this method, often combining Shengmai Drink with descending and stomach-harmonizing herbs such as roasted loquat leaves, as discussed in "Zhou Shaohua's Insights on Neurological Prescriptions". The common pathogenesis of this condition is "Qi" deficiency leading to the failure of water and dampness to transform into phlegm, which obscures the clear orifices. Therefore, this formula is applied. "Ben Jing" once recorded the properties of ginseng:

"Ginseng: It nourishes and tonifies the five visceral organs, calms the spirit, alleviates palpitations and fright, dispels pathogenic factors, improves eyesight, and enhances mental clarity and intelligence". Ophiopogon japonicus: "It primarily addresses "Qi" stagnation in the heart and abdomen, injuries to the middle jiao and overeating, as well as the obstruction of the stomach's collateral vessels, addressing emaciation and shortness of breath". Schisandra chinensis: "It primarily boosts "Qi", addresses cough and reverse "Qi" flow, treats fatigue-induced emaciation, supplements deficiencies, strengthens "Yin", and enhances male reproductive essence".

Together, these three herbs, one tonifying, one clearing, and one astringing work in harmony to tonify "Qi", strengthen the spleen, resolve dampness, and generate fluids. The brilliance of Professor Zhou's prescriptions lie in their flexible and adaptive application, integrating symptom analysis with disease diagnosis,

seeking the root cause through careful examination of symptoms, and tailoring treatments based on syndrome differentiation. Moreover, he comprehensively treats each patient by combining methods such as resolving phlegm, tonifying the kidneys, dispelling blood stasis, calming wind, and strengthening the spleen, fully embodying the academic philosophy of combining syndrome differentiation with disease diagnosis and adopting a holistic approach. This ensures that complex and challenging conditions in each patient are effectively addressed with prompt results.

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