

Professor Kuang Shixiang Treatment of Myasthenia Gravis Two Cases

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Abstract: Myasthenia gravis (MG) is one of the internationally recognized refractory neurological diseases, and there is no ideal treatment so far. Western medicine treatment is based on symptomatic treatment to relieve symptoms. In terms of effect, western medicine treatment takes effect quickly and pays more attention to the realization of short-term goals. In the treatment of traditional Chinese medicine, more attention is paid to “holistic concept and dialectical treatment”, which is dominated by regulating the function of zang-fu organs and promoting the functional recovery of the body. Compared with western medicine, traditional Chinese medicine has a slow onset, but because of its uniqueness, once it is effective, it can make the disease not easy to relapse. From the long-term goal, it highlights the importance of traditional Chinese medicine. Professor Kuang Shixiang has been committed to the use of traditional Chinese medicine in the treatment of MG in the past 20 years, advocating the combination of traditional Chinese and Western medicine, and has accumulated rich clinical experience. Professor Kuang Shixiang attaches great importance to the therapeutic principles of tonifying spleen and kidney, warming yang and removing dampness, removing blood stasis and detoxification, which provides an effective idea and method for the treatment of MG with traditional Chinese medicine.

1. Introduction

Myasthenia gravis (MG) is an autoimmune disease characterized by muscle weakness and fatigue. The disease is relatively stable but easy to relapse. According to domestic and foreign literature, the annual incidence rate worldwide is about 5-30 per million people [1-3]. At present, the clinical treatment of MG mainly uses glucocorticoid immunosuppressive agents, cholinesterase inhibitors, hematopoietic stem cell transplantation, targeted B cells and other treatments. Although the short-term efficacy is significant, the disease is easy to relapse, and there are many adverse reactions [4-5].

There is no record of “myasthenia gravis” in the literature of traditional Chinese medicine. According to its clinical symptoms such as eyelid weakness, drooping, limb weakness, and dysphagia, modern doctors attribute it to “flaccidity”, “eyelid waste” and other categories. *Treatment*

criteria · *Miscellaneous diseases* cloud, “flaccidity, flaccidity and weakness of the hands and feet, and slow longitudinal without receiving” ancient physicians have long described dysphagia [6], *Lingshu* · *Youmu speechless* said, “Throat, the way of water and grain.”

Professor Kuang Shixiang is a famous Chinese medicine doctor in Guizhou Province. He is the chief physician of the Department of Neurology, the Second Affiliated Hospital of Guizhou University of Traditional Chinese Medicine, and the doctoral tutor. He has been engaged in the study of myasthenia gravis for more than 20 years and has accumulated rich clinical experience. I have the honor to follow Professor Kuang’s clinical study. Now I have 2 cases to explore the treatment.

2. Ocular MG

Liu, a 62-year-old male, was first diagnosed on July 24, 2023. He was admitted to the Second Affiliated Hospital of Guizhou University of Traditional Chinese Medicine because of “right eyelid ptosis for 5 days”. Symptoms: right eyelid ptosis, with double shadow, light in the morning and heavy in the evening, morbid fatigue fluctuation, no weakness of limbs, soft neck, no drinking water choking cough, hoarseness, difficulty in chewing, difficulty in swallowing, normal urination, loose stool, pale red tongue, thin white fur, and weak pulse. Fatigue test (+), neostigmine test (+), diagnosed as myasthenia gravis ocular type. Diagnosis of traditional Chinese medicine: flaccidity syndrome spleen qi deficiency syndrome. Western medicine diagnosis: myasthenia gravis eye muscle type. Chinese medicine prescription: Milkvetch root 120 g, Radix Ophiopogonis 20 g, Coastal glehnia root 30 g, Hairyvein agrimonia herb 30 g, Dodder seed 20 g, Songaria cynomorium herb 20 g, Epimedium herb 20 g, Semen Coicis 20 g, Manchurian wildginger 20 g, Herba Ephedrae 15 g, Chinese angelica 15 g, Kudzu vine root 60 g, Pericarpium Citri Reticulatae 15 g, Largehead atractylodes rhizome 15 g, Tangshen 30 g, Accessory sclerite 60 g be decocted first, 5 doses, decocted in water, one dose a day, three times a day. Western medicine treatment: oral administration of pyridostigmine bromide tablets, 60 mg each time, three times a day. On July 29, the second diagnosis showed that the right eyelid ptosis was significantly improved compared with the previous one, and the double shadow was improved compared with the previous one. Recently, there was a slight cough and a slight loose stool. The effect is not more prescription, on the basis of the first diagnosis, subtract 10 g of Tangshen, add 10 g of Songaria cynomorium herb, add 15 g of Hairyvein agrimonia herb, add 20 g of Radix Platycodonis, add 10 g of Radix et Rhizoma Glycyrrhizae. 10 doses, decoction method with the previous. After that, the patients came to the clinic regularly, and the symptoms gradually improved, all of which were treated with the original dialectical addition and subtraction. After March, the patient was diagnosed with no drooping right eyelid, no double shadow, no cough and expectoration, no dry mouth and bitter mouth, and normal urine and stool. The original prescription was continued to be added and subtracted according to the symptoms to consolidate the curative effect, and the pyridostigmine bromide tablets were discontinued. After that, the patient was followed up regularly and no recurrence was found.

A note of comment: This case is “early” in the clinical stage defined by Professor Kuang Shixiang. The patient is a middle-aged and elderly male. Professor Kuang is usually deficient in spleen qi. The spleen is the foundation of acquired, the source of qi and blood biochemistry. Spleen deficiency, qi and blood biochemistry is insufficient, tendons and veins are dystrophy, spleen deficiency and muscle insufficiency, so eyelid ptosis is seen. The movement is gas consumption, so it is aggravated after the activity, and the morbid fatigue fluctuates. The tongue is pink, the moss is thin and white, and the pulse is weak, which is a sign of spleen deficiency. Therefore, the prescription uses a large dose of Astragalus membranaceus to improve the body’s immunity, Codonopsis pilosula to tonify the middle and replenish qi, and cooperates with Puerariae Lobatae

Radix to enhance yang and consolidate the surface. Poria cocos, Coix Seed, Fried Atractylodes Rhizome to invigorate the spleen and remove dampness are ministers. Tangerine peel is used to regulate qi and invigorate the spleen, and Angelica sinensis is used to tonify blood and nutrient, so as to regulate qi and blood. Five-finger peach is used to invigorate the spleen and remove dampness, tonify qi and consolidate the surface, to warm kidney yang, tonify spleen deficiency, tonify kidney and essence, to fill lean blood, tonify qi and tonify deficiency, strengthen bones and muscles, asarum to disperse cold and relieve pain. Radix Glehniae and Radix Ophiopogonis must be used to nourish qi and blood, clear heat, nourish yin and generate fluid. The whole formula plays together to make the spleen and kidney double supplement, strengthen the tendons and bones, the muscles are nourished, and the machine force is restored. The patient took effect quickly after taking the medicine, and the symptoms were improved during the second diagnosis. Therefore, on the basis of the first diagnosis, the prescription was added and subtracted according to the symptoms, and pyridostigmine bromide tablets were discontinued after 3 months of treatment, and no recurrence was followed up.

3. Moderate generalized MG

Zhou, female, 50 years old, was newly diagnosed on May 01, 2022. Due to “systemic fatigue with dysphagia for 1 + years” in “Weng’an County Hospital of Traditional Chinese Medicine”, chest CT showed “mediastinal tumor”. After improving the relevant examination, “thoracoscopic mediastinal tumor resection” was performed. The pathological response was thymoma (B1) type. After visiting the “Guizhou Provincial People’s Hospital”, he was diagnosed as “moderate generalized myasthenia gravis”. He was treated with prednisone acetate tablets, mycophenolate mofetil tablets and pyridostigmine bromide tablets for 1 + years. So he turned to seek the treatment of integrated traditional Chinese and Western medicine. Symptoms: general fatigue, comb hair difficult, up and down the stairs need to rest, sometimes itchy skin, mainly to the head, upper limbs, back skin paroxysmal itching, sometimes abdominal pain, the spirit of the disease, poor diet, sleep easy to wake up, Normal urination, Pale red tongue, thin white fur, deep weak pulse. TCM diagnosis: flaccidity syndrome, spleen and kidney yang deficiency syndrome. Western medicine diagnosis: moderate generalized myasthenia gravis. Chinese medicine prescription: Milkvetch root 120 g, Tangshen 30 g, Largehead atractylodes rhizome 15 g, Chinese angelica 15 g, Kudzu vine root 30 g, Prepared fleeceflower root 20 g, Fructus Lycii 20 g, Debark peony root 20 g, Epimedium herb 20 g, Radix Morindae Officinalis 20 g, Common cnidium fruit 30 g, Pericarpium Citri Reticulatae 12 g, Fructus Crataegi 12 g, Glabrous greenbrier rhizome 30 g, Malt 20 g, Accessory sclerite 30 g be decocted first, Raw land 20 g. 12 doses, decocted in water, one dose a day, three times a day. On May 11, the second diagnosis showed that the general weakness was improved, the skin itching was improved, the abdominal pain disappeared, the diet was improved, the night sleep was easy to wake up, and there was diarrhea, the tongue was light red, the moss was thin yellow, and the pulse was fine. On the basis of the first diagnosis prescription, the effect is not changed. On the basis of the first diagnosis prescription, go to Common cnidium fruit, Radix Paeoniae Alba, Radix Morindae Officinalis, Hawthorn fruit, Malt, Milkvetch root reduced by 60 g, Prepared fleeceflower root reduced by 5 g, add Heterophylly falsestarwort root 20 g, Chinese yam 30 g, Radix Salviae Miltiorrhizae 20 g, Coastal glehnia root 30 g, Radix Ophiopogonis 15 g. 12 doses, decoction method with the previous. On May 24 th, the three diagnostic methods showed that the body fatigue was significantly improved, the mental state was good, the skin itching disappeared, no diarrhea, sleep was good, the tongue was pink, the moss was thin and yellow, and the pulse was heavy and thin. The symptoms of the patients were significantly improved, and the original prescription was modified according to the syndrome. The patient was treated with regular outpatient follow-up, and

the condition was stable. After 3 months, prednisone acetate tablets, mycophenolate mofetil tablets and pyridostigmine bromide tablets were gradually discontinued. After 2 years of follow-up, the patient was stable and did not relapse.

A note of comment: This case belongs to the “wave recurrence period” in Professor Kuang Shixiang’s clinical stage. The patient is a middle-aged woman, who usually has spleen qi deficiency and insufficient middle qi. In addition, the course of the disease is long, and the spleen and stomach are damaged for a long time to spleen qi deficiency. The middle-aged kidney qi gradually declines, the course of the disease is long, and the long-term disease injures the kidney. The kidney is the congenital root, the root of Yuanyin Yuanyang, the spleen is the acquired root, the source of qi and blood biochemistry, and the spleen and kidney deficiency is the source of qi and blood biochemistry. The lack of source, spleen deficiency and muscle loss, long-term disease of limbs and veins, so the whole body is weak; the spleen qi deficiency, the spleen is abnormal, the skin is not nourished, so itchy discomfort. The patient complained of abdominal pain, which was actually due to the poor operation of qi and blood, and the pain was caused by the lack of glory, so the abdominal pain; spleen qi deficiency, transportation and transformation is not healthy, qi and blood biochemical lack of source, can not be immersed in the heart, then the mind dystrophy, sleep at night restless. The tongue pulse is also a sign of indication. Therefore, a large dose of *Astragalus membranaceus* is used as the monarch, tonify qi and solidify the surface, and add soil *Poria cocos*, fried *Atractylodes macrocephala*, and *Codonopsis pilosula* to enhance the effect of invigorating qi and invigorating spleen; *pueraria lobata*, *Radix Paeoniae Alba*, *Radix Angelicae Sinensis*, *Fructus Lycii* nourish blood and regulate menstruation, nourish liver and kidney; the patient complained that it was easy to wake up during sleep at night, which was actually due to the lack of qi and blood, and the deficiency of essence and blood. Therefore, the *Polygonum multiflorum* was prepared to supplement the liver and kidney and benefit the essence and blood. The patient complained of abdominal pain and poor diet. If it was not proud, it would be painful. White peony root and tangerine peel were used to relieve pain, and coke hawthorn was used to relieve food and promote qi. The whole party played the effect of Yiqi Shengyang. After the first diagnosis, the patient’s symptoms were significantly improved, and the mental state was good. Sometimes there was diarrhea, the pulse was heavy and thin, and there was still sleep at night, which was easy to wake up. In fact, it was yin deficiency and kidney yang deficiency. Therefore, *Cnidium monnieri*, *Paeoniae Radix Alba*, *Morinda officinalis*, Hawthorn, Malt, *Astragalus* reduced by 60 g, *Polygoni Multiflori Radix* reduced by 5 g, and added with *Radix Pseudostellariae* Yiqi Yangyin, *Cornus officinalis*, *Cistanche* tonic kidney yang, yam spleen and stomach tonic kidney. During the three diagnoses, the symptoms were significantly improved compared with the previous ones, and the original prescription was continued to be modified with the syndrome. The patient was treated with regular outpatient follow-up, and the condition was stable. On the basis of taking traditional Chinese medicine, prednisone acetate tablets, mycophenolate mofetil tablets and pyridostigmine bromide were gradually discontinued after 3 months. After 2 years of follow-up, the patient was in stable condition.

4. Conclusions

Myasthenia gravis is a refractory and rare disease in clinic. In the long-term clinical observation, Professor Kuang Shixiang found that most patients are often accompanied by pale mouth, loose stools, loss of appetite, pale tongue and greasy fur, in addition to common eyelid ptosis, proximal limb weakness and other symptoms. Therefore, in terms of medication, first of all, the method of double supplementation of spleen and kidney is adopted. Taking the medical record as an example, the “Buzhong Yiqi Decoction” is used as the basic prescription to add and subtract, so that the

spleen can restore the function of acquired transportation and transformation, and the kidney can restore the abundance of innate essence. Large doses of Huangqi and Dangshen were used as monarch drugs, which were intended to tonify the middle and replenish qi, enhance yang and consolidate the surface. Modern doctors all treat myasthenia gravis from the spleen and stomach [7-8]. Professor Kuang believes that in the early stage of MG, attention should be paid to the spleen and kidney [9]. On this basis, in the early stage, spleen qi deficiency, long-term illness and kidney, spleen is the acquired foundation, kidney is the congenital foundation, spleen is the source of qi and blood, and kidney is the source of qi. The spleen fails to transport and transform, the muscles and bones lose their nourishment, and the deficiency of kidney essence leads to the dysfunction of muscles and bones. In addition to the spleen and kidney as the basis, according to the symptoms of the disease, more in the muscle lesions, which is mostly due to the weakness of the five zang-organs, any one of the zang-organs deficiency can lead to this disease, zang-organs essence blood and body fluid deficiency, dysfunction, the formation of a vicious cycle, muscle dystrophy, meridian stasis, resulting in muscle weakness, after a long time, lead to the disease. Professor Kuang also stressed the importance of the coordination between the functions of the organs. In addition, according to the different stages of the development of the disease, the classification of the disease (Osseman classification) is combined to guide the treatment. Because the disease is lingering, easy to remove blood stasis and dampness, evil love can not go, so MG patients with repeated attacks, by the long-term problems of the disease. Therefore, invigorating the spleen, removing dampness and detoxification should run through the disease all the time, and the evil should go to the right, so as to promote the prognosis of the disease. For example, adding Rhizoma Atractylodis and Rhizoma Smilacis are intended to invigorate the spleen and remove dampness and strengthen the function of water and dampness. Make the spleen movement to get the right. In addition, Danshen can promote blood circulation and remove blood stasis, regulate qi and blood, and nourish the limbs and the whole body smoothly. Ephedra first, slightly open the striae, so that the evil out, to eliminate the efficacy of stubborn disease. Finally, in the prognosis period, the use of traditional Chinese medicine acupuncture and other means of combined treatment of diseases, multiple measures simultaneously. Inform patients to avoid reducing the incidence of MG diseases induced by exogenous and diarrhea, as well as the impact of living environment and diet, and avoid dampness invading the body. And more emphasis on the combination of the patient's condition, less progressive hormone and other inhibitors to take, for the treatment of myasthenia gravis brings new hope.

Professor Kuang also believes that the combination of traditional Chinese and Western medicine is a reliable and effective way to improve the prevention and treatment of this disease. Professor Kuang believes that the diagnosis and treatment of this disease should focus on immune regulation. For example, the use of a large number of Astragalus has the effect of improving the body's immunity. Agrimony, ephedra, etc. can strengthen the symptomatic treatment effect of cholinesterase inhibitors; and stressed that the key to treatment is to reduce recurrence, so that the symptoms of the disease no longer rebound. He emphasized that the immunity should be regulated in stages, and the evolution of the disease was divided into five stages (periods): early stage, remission stage, stable stage, recovery stage, and fluctuating recurrence stage [10]. Diagnosis and treatment were carried out according to the characteristics of immune abnormalities in each stage. Professor Kuang believes that the treatment of this disease by combining traditional Chinese and Western medicine will significantly improve the clinical efficacy. For example, in the above two cases, western medicine eliminates local lesions and achieves the short-term goal of relieving symptoms; traditional Chinese medicine regulates immune function, stabilizes the condition, and pays attention to long-term efficacy. The combination of Chinese and western medicine treatment,

the integration of local and overall treatment, the unity of short-term and long-term goals, to improve the overall level of myasthenia gravis prevention and treatment effect.

Myasthenia gravis is one of the refractory diseases in neurology, and the clinical prevalence and incidence are increasing. The dysfunction of spleen and kidney is the main cause of MG, and it is also affected by pathological factors such as dampness and blood stasis. Professor Kuang Shixiang in the summary of long-term clinical experience, to “spleen and kidney double tonic, dampness and blood stasis, tendon and vein nourishing, strong tendon and vein muscle” as the guiding ideology, pay attention to the combination of traditional Chinese and western medicine to prevent the disease [11], to improve the clinical efficacy of traditional Chinese medicine treatment of MG play an important role. Modern medicine believes that the pathogenesis of myasthenia gravis is related to the body’s immunity [12], and some Chinese herbal medicines have been proved to have a certain role in improving the body’s immunity [13]. This paper summarizes Professor Kuang’s clinical medical records, and provides a new path for the treatment of myasthenia gravis with traditional Chinese medicine.

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