

# *Overview of lightning fire moxibustion treatment of dry eye*

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**Abstract:** This paper discusses the concept, symptom, etiology and pathogenesis of dry eye, and the treatment of lightning moxibustion to master the clinical operation methods and matters needing attention of lightning moxibustion. Lightning moxibustion is effective and safe in the treatment of dry eye to prevent and find more simple and efficient treatment at the same time, and promote it in clinic.

## 1. Introduction

Dry eye is a multi-factor disease of tears and ocular surface (cornea, conjunctiva, accessory lacrimal gland and meibomian gland), and various symptoms of unstable tear film or ocular surface changes caused by abnormal quality or quantity of tears and abnormal fluid dynamics of tears caused by various reasons [1-3].

Dry eye syndrome in Chinese medicine belongs to the categories of "white astringent syndrome [4-5]", "dryness syndrome", "divine water will dry [6]" and so on. "Syndrome and treatment criteria ·Seven tips" cloud: "See beads outside the God water dry and not Ying embellish. It is best not to know, although form in words, can not wonderful its shape. Is the fire Yu steaming paste, so the semen is not clear, and beads do not run, juice will be exhausted. Although there is a bead of masturbation tears, also does not moisten "visible dry eye syndrome due to Yin deficiency heat, burning body fluid, eyes lost moisten. Huangdi Neijing believes that the eyes can see things because of the nourishing and nourishing qi of the five Zang and six fu organs. If the meridians are not smooth, Qi and blood cannot be prosperous in the eyes, and then the eyes will be dry and uncomfortable [7-8].

## 2. Etiology

The incidence of dry eye syndrome is relatively high in the world. Generally speaking, there are more women than men suffering from this symptom, and more old people than middle-aged people and young people. The incidence of dry eye syndrome is 23.5% in Taiwan, 21% in Beijing, 30.8% in Xi 'an and 52.4% in Qinghai. It may have something to do with climate. The drier the climate, the more prone to dry eyes. Compared with European countries, the incidence of dry eye disease in China is higher, and the incidence of dry eye disease is gradually increasing and becoming younger. The incidence of dry eye disease in China has reached 13.1%. Many factors lead to dry eye, such as due to geography, climate, humidity environmental pollution, hygiene conditions, personal habits caused by mild dry eye patients (such as long-term in the desert, air conditioning environment,

staring at the computer screen for a long time or in the strong light environment, etc.) generally only mild dry eye symptoms, and no abnormal obvious eye surface injury. Cancel these trigger factors or timely change living habits, can improve the discomfort of eyes; However, the pathogenesis of dry eye syndrome caused by specific local or systemic causes (such as inflammation, sex hormone imbalance, cell apoptosis, immunity, abnormal neuroregulation, burn, allergy, etc.) is very complicated [9-11]. Dry eye disease is the most common ocular surface disease, also known as dry keratoconjunctivitis, symptoms lasting can make the corneal transparency decreased, vision loss, thereby affecting work, life, and even lead to blindness. At present, the treatment of this disease mainly uses external drops of artificial tears to moisten corneal conjunctiva, increase tear viscosity, and slow down its evaporation or excretion, but it can improve dry eye symptoms [12-16]. At present, there is no very effective treatment, how to effectively treat dry eye disease is our research direction. In recent years, acupuncture and moxibustion therapy has been gradually widely used in the clinical treatment of dry eye syndrome, and has achieved relatively satisfactory curative effect [17-19].

### 3. Diagnostic criteria

Symptoms such as eye dryness, foreign body sensation, pruritus, reduced vision, etc., which meet the following diagnostic criteria [20-21]. 1. Tear film rupture time (BUT)<10 s; 2. Basic tear secretion test (Schirmer I)< 10mm/5min; 3. Positive fluorescein staining of cornea and conjunctiva [22-25].

## 4. Treatment

### 4.1 Treatment principle

Lightning moxibustion is moxibustion strips made of special Chinese medicine, which are suspended on the acupoints of the human body after being lit. Moxibustion with thunder and fire can be traced back to the Ming Dynasty. At that time, it was called "Thunder and fire magic needle". It was a special moxibustion method developed on the basis of traditional Chinese medicine. Thunder and fire moxibustion is formed by improving "thunder and fire magic needle". It is made by adding agarwood, wood fragrance, frankincense, Qiang huo and other aromatic drugs to moxa velvet, warming channels and clearing collagms. It has the functions of dispelling surface wind, dispelling cold and dampness, regulating qi and blood, removing blood stasis and relieving pain, eliminating inflammation, reducing pain and replenishing vitality. At the same time, "actual moxibustion" was renamed "hanging moxibustion" [26] to avoid the possibility of trauma, so that the operation method is more simple and convenient, which is more acceptable to patients, and the cost is not very high. Compared with ordinary moxibustion, thunderfire moxibustion in addition to the role of warming meridians, drug flavor is fiercer, firepower is fiercer, penetration force is also strengthened, at the same time, accelerate local blood circulation, accelerate the metabolism of the eye.

The treatment of dry eyes is mainly the implementation of lightning moxibustion on the eyes, combined with oral Chinese medicine, fumigation massage around the eyes or eye drops treatment. Moxibustion has eight meridians around the eyes, including three Yang meridians from the hand to the head of the upper limb, three Yang meridians from the head to the foot of the lower limb, as well as Shaoyin heart meridian of the hand and Jueyin liver meridian of the foot. The main acupoints are Qingming, Sibai, Taiyang, Zao Zhu, Ermen, Yifeng and Hegu. Foot sun bladder meridian starts at Jingming point, Jingming is also the intersection point of foot sun meridian and foot Yangming meridian, which can evacuate wind heat, clear eyes and remove pqi, regulate eye qi and blood; Save

bamboo can dispel wind and bright eyes; Sibai is the acupoint of the stomach meridian of foot Yangming. Yangming meridian has much Qi and much blood, which can adjust the qi and blood around the eyes. Temple for strange points, can make the mind clear, eyes bright; Ear-door and Yifeng are the same point of Shaoyang Sanjiao meridian, which can remove eye circulation stasis and water stagnation; There are mu 1, mu 2 and eye points in the earlobe, which can help to feed the circulation of qi and blood in the eyes. Ear points are not only the reaction point of diseases, but also the stimulating part of disease prevention and treatment. Moxibustion can also bury needles and press seeds [27-28]. The original point of the large intestine meridian of Hand Yangming is Hegu Point. The main passage of the three Qi is through the five zang and six fu organs. The original qi runs through the three jiao and is transmitted to the whole body, including the eyes. Through the powerful firepower of lightning and fire moxibustion and drug properties to improve the blood flow around the eye, accelerate local metabolism. Traditional Chinese medicine hot smoke around the eyes, combined with massage local acupoints in the eye area can circulate the meridian and activate collaterals, harmonizing Qi and blood. "Huangdi Neijing" cloud: "Moisten the blood in the eyes, the eyes get Qi and blood and can see" to regulate qi and blood, so as to improve the related symptoms of dry eye.

## 4.2 Specific Operations

The specific operation of lightning moxibustion: first of all, we need a treatment room with large space and open ventilation and smoke exhaust equipment. Patients should take a sitting position, with straight head, first moxibustion on the forehead, reciprocating for 3 minutes from side to side, until the forehead skin is slightly red. We must pay attention to the moxibustion strip 2~3cm away from the skin to prevent scalding the forehead skin; Let the patient close his eyes, first move moxa sticks slowly parallel to the top, moxibustion on both eyes for 2min until the skin is slightly red, then carry out clockwise moxibustion around the left and right eyes, namely circular moxibustion, about 3min for each eye, and pay attention to the distance from the skin should not be too close to about 1~2cm. Then the bird pecking moxibustion on eye eye Ming, Zhu, fish waist, Sibai, sun and other acupoint moxibustion, moxibustion position in the patient with a slight hot stay 1~2min after removal, each point about 20 times, at the same time with the thumb or index finger abdominal massage acupoint 2 times; Finally, moxibustion was carried out on both ears for 2min. The skin was slightly red, and then the birds pecked moxibustion on both ears (bilateral), earlobes (bilateral) and Hegu (bilateral) for 1min each. The whole procedure was about 20min, once a day for 4 weeks [29-33].

## 5. Experience

Modern research has found that local massage around the eyes can improve the excitability of the central nervous system and regulate human immunity at the same time, so massage can be combined with lightning moxibustion to treat dry eyes. Moxibustion can promote the secretion of lacrimal glands and improve tear quality [34-38]. In particular, through this method, the frequency and time of local administration can be reduced for patients, so as to reduce the irritation and side effects of drugs. Thunder-fire moxibustion also has a certain effect in the treatment of myopia, visual fatigue syndrome and other aspects, especially in improving the symptoms of visual fatigue. Lightning moxibustion can correct myopia by improving the function of ciliary muscle contraction. However, it is difficult for patients to insist on the operation of thunder-fire moxibustion, and most patients operate at home by themselves. Although it reduces the inconvenience of patients travelling to and from the hospital, the therapeutic effect is far less good than that operated by professionals in the hospital, and the treatment quality is greatly reduced [39-41]. Therefore, how to improve and

solve the treatment program of dry eye disease, make it more safe, convenient and effective, and the patient compliance is higher is the direction of future efforts.

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