

Understanding of Dry Eye Syndrome in Traditional Chinese Medicine

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Abstract: Explore the current status of Chinese medicine understanding and prevention and treatment of dry eye, so as to improve the efficacy of Chinese medicine in the diagnosis and treatment of dry eye.

Keywords: Traditional Chinese medicine; Dry eye; Understanding; Review

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1. Introduction

Dry eye is one of the most common chronic ocular surface diseases. At present, due to the popularity of video terminals and the aging of the population, the incidence of dry eye is gradually increasing and tends to be younger. The global incidence of dry eye is 5.5%~33.7%, and the incidence in my country is 21%~30% [1].

2. TCM's understanding of dry eye syndrome

2.1. Disease name

In Chinese ophthalmology, dry eye syndrome belongs to the category of "White Astringency." In "Yuanjiquiwei": "It is neither red nor swollen, not refreshing, sandy and faint, and the name is white and astringent [2]." Wang Kentang of the Ming Dynasty described it as "Dry and Dim" in the book "Zheng Sheng [3]." In "Theories of the Sources and Phenomenon of All Diseases," there is the title of "The Eyes are Astringent [4]."

3. Etiology and pathogenesis

3.1. Liver work

The head is the liver orifice, born in the kidney, and used for the heart. If the liver blood is sufficient, the wood qi rises, and the blood flow reaches the eye, the spirit is bright. Excessive appetite, exhaustion of eyesight, etc. can deplete qi and blood, cause insufficient qi and blood in the liver, lack of nourishment of blood or dark consumption of essence, qi and yin fluid, inflammation of deficiency fire, decoction of body fluid, diminished light, and astringent eyes. Fang Yuting et al. [5] believed that excessive eye use broke the human body's circadian rhythm, disrupted the law of the ebb and flow of yin and yang, and led to imbalance between yin and yang and eye disease.

3.2. Liver and kidney yin deficiency

"Mujing Dacheng·Volume 2·Eighty-one Symptoms" says: "This visceral manifestation of fire, although the true essence may not be absent, but the self-induced evil and delusional consumption of ointment." It

is believed that this disease is caused by a lack of fire. It is closely related to liver and kidney yin deficiency. Deficiency of kidney yin, lack of source of liver yin, water does not contain wood, and relatively hyperactive liver yang, causing inflammation of liver fire and damage to eye fluid. The liver and kidney yin fluid are depleted, and the fire is uncontrollable. The phase fire is fierce, and violent movement can torture the true yin, and the lack of true yin can damage the liver yin, so the eyes are astringent. Lian Haihong^[6] believes that deficiency of liver and kidney yin is the root, hyperactivity of yang is the mark, the mixture of deficiency and excess, and liver heat are the main causes of modern dry eye disease.

3.3. Lung yin deficiency

“Surveying Yaohan • Volume 3 • White Pain” says: “White astringency... is the fire of qi and hidden, damp and hot spleen, lungs and collaterals, which are more common in autumn^[7].” Those with dryness have inherent yin and yang, their sex is dry and easy to damage body fluids, and those with lungs are exposed to autumn qi, and suffer from dry evils, and damage the lungs first. Lung governs the body’s qi, and when there is constant declining, the five internal organs are closed, the eyes and collaterals are unblocked, and the divine light is more. Li Pingshan^[8] believes that the dryness of the eyeballs is caused by “dryness” injuring the five internal organs, causing the lungs, liver, and kidneys to injure fluid consumption and loss of normal physiological functions.

3.4. Deficiency of spleen and weak qi

“The spleen is the head of the yin, and the eye is the bloodline. Therefore, if the spleen is weak, the essence of the five internal organs is lost and cannot be attributed to the eye^[9].” The role of the spleen and stomach’s axis is to grow the four internal organs, metabolize the blood and vitality, and lose it to the eyes. If the function of the spleen and stomach is lost, the energy of the blood and the essence of energy is deprived, and the source of energy is lost.

4. The method of traditional Chinese medicine to treat dry eye

4.1. Acupuncture treatment

Wen Yong et al.^[10] divided 80 cases into two groups. In the acupuncture group, 40 cases used meridian and viscera syndrome differentiation acupuncture combined with thunder fire moxibustion. 77.5% and 45.0% in the drug group. Duan Jianwei^[11] divided 62 cases into 2 groups. 32 cases in the experimental group were treated with artificial tears and were treated with magpie-dengmei acupuncture. 30 cases in the control group were treated with artificial tears. The total effective rate was 90.63% in the experimental group. The control group was 70.00%.

4.2. Chinese medicine ultrasonic atomization treatment

Li Jianliang et al.^[12] divided 120 cases into an observation group and a control group, each with 60 cases (120 eyes). The observation group was treated with Shuyanfang ultrasonic nebulization combined with local instillation of sodium hyaluronate eye drops, and the control group was treated with sodium hyaluronate Eye drops eye drops treatment. The total effective rate of the observation group was 90%, and that of the control group was 65%. Huang Yufeng et al.^[13] divided 60 patients (120 eyes) into Chinese medicine ultrasonic atomization combined with artificial tears group (treatment group) and artificial tears (control group). The total effective rate of the treatment group was higher than that of the control group ($P < 0.05$).

4.3. Massage therapy

Wang Yu^[14] divided 80 cases into experimental group and control group. Both groups were treated with

sodium hyaluronate eye drops, while the experimental group was treated with eight methods of eye massage combined with five-element music therapy. The total effective rate of treatment in the experimental group was higher than that in the control group ($P < 0.05$). Huang Tingqiu et al. [15] divided 106 cases into a combination group and a control group. The control group was treated with traditional Chinese medicine atomized fumigation, and the combination group was treated with traditional Chinese medicine atomized fumigation combined with humidifying eye massager. The total effective rate of the combined group was 94.23%, and the control group was 78.10%.

5. Summary

In the future, we should focus on the advantages of the overall adjustment of traditional Chinese medicine, take into account some parts, use modern medical science and technology, and rationally use multiple methods to comprehensively prevent and treat dry eye, improve the level of traditional Chinese medicine in the prevention and treatment of dry eye, and provide more for the prevention and treatment of dry eye.

Disclosure statement

The authors declare no conflict of interest.

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