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Research progress on the clinical application of traditional Chinese and Western medicine in the treatment of dry eye after phacoemulsification cataract surgery

Xu Bing[1], Shen Lanke[1,2], Kou Lieling[1,2]

[1]Shaanxi University of Chinese Medicine, Xianyang, Shaanxi, China
[2]Ankang Traditional Chinese Medicine Hospital, Ankang, Shaanxi, China

Abstract: *Dry eye after cataract surgery is one of the common complications of cataract phacoemulsification. Its typical symptoms are eye dryness, foreign body sensation, tearing, burning, etc. The auxiliary examination is shortened tear break-up time (BUT) and corneal fluorescent staining (FL) positivity is the main diagnostic basis. Artificial tears, non-steroidal anti-inflammatory drugs and other topical eye drops are commonly used in clinical treatment. In recent years, internal and external treatment of traditional Chinese medicine has been quite effective in alleviating and treating dry eye after cataract surgery, especially moderate to severe and chronic dry eye. The pathogenesis of dry eye after cataract surgery and the progress of traditional Chinese and Western medicine treatments in recent years are reviewed as follows.*

Keywords: *dry eye syndrome; cataract surgery; traditional Chinese and Western medicine*

1. Introduction

Phacoemulsification combined with intraocular lens implantation (PHACO+IOL) is the only way to quickly and effectively treat cataracts and rebuild the patient's visual function. However, this surgery will affect the patient's tear film stability and ocular surface structure to a certain extent, causing dry eye in the operated eye or aggravating the original dry eye symptoms and signs[1]. Affected by many factors, the incidence of dry eye after cataract surgery varies greatly, ranging from 9.8% to 96.6%, and the incidence of postoperative dry eye has a gradually increasing trend[2], which not only affects the patient's postoperative ocular surface recovery and Visual quality of life will also bring financial and psychological burdens to patients. This article reviews the etiology and pathogenesis of dry eye after phacoemulsification surgery and the progress of traditional Chinese and Western medicine treatments.

2. Cause and pathogenesis

2.1 Causes and pathogenesis of traditional Chinese medicine

Traditional Chinese medicine describes dry eye syndrome as a condition in which tears are reduced or even exhausted, resulting in dryness and loss of luster in the white and black eyes, loss of rotation, and conscious dryness and discomfort in the eyes. It belongs to the traditional Chinese medicine "white astringent syndrome" and "shenshui will dry up syndrome", etc. The scope is related to external infections, internal injuries, related meridians and internal organs, etc., especially closely related to the liver and kidneys[3].

Liu Wansu established the Xuanfu theory, which was gradually improved by subsequent generations of doctors. They believed that Xuanfu was a passageway for essence, qi, blood, and body fluids to flow in and out. Whether Xuanfu is accessible or not is closely related to dry eye syndrome; modern doctors Chen Dafu believed that poor Shaoyang cardinal function caused abnormal distribution of body fluids, loss of nourishment and dryness of the eyes as the main pathogenesis; Wang Mingfang proposed that "trauma induces liver heat" in the dialectics of eye trauma, and believed that elderly patients suffer from liver and kidney insufficiency. Due to corneal and conjunctival trauma caused by eye surgery, wind-heat pathogenic energy invades through the surgical incision, causing qi and blood to flow improperly. It turns

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into heat over time and burns body fluids. Therefore, some scholars believe that the main pathogenesis of dry eye after cataract surgery is blood stasis and deficiency, that is, blood stasis and heat. Retention, yin deficiency, and body fluid deficiency; Zuo Jianxia et al. believe that the three evils of wind, dampness, and heat are the main factors leading to dry eye syndrome after cataract surgery[4]. The treatment should be to clear away heat and dampness, dispel wind, and improve eyesight. Internal injury factors such as improper diet, excessive work and rest, and excessive emotions also affect the metabolization of essence and qi in the organs and the distribution of body fluids, leading to the emergence of dry eye symptoms after cataract surgery.

2.2. Pathogenesis of Western Medicine

In modern medicine, dry eye is considered to be a multifactorial disease of the ocular surface caused by the loss of tear film homeostasis caused by a vicious cycle of tear film hypertonicity and instability, accompanied by increased ocular surface inflammation, damage, and neurosensory abnormalities. It is caused by a combination of multiple factors during the perioperative period. Combined with recent research on the pathogenesis of dry eye after cataract surgery, it can be summarized as follows:

1) Surgical factors: ① Mechanical damage to the nerve fibers around the cornea affects normal tear gland stimulation, tear production and excitation conduction, and affects tear coating, tear film reconstruction and the recovery of the normal structure of the ocular surface; ② Repeated entry and exit of instruments in and out of the incision during the operation will cause Change the environment of the anterior chamber, produce inflammatory mediators, and cause inflammatory reactions; ③ Surgical incisions, corneal tissue edema, wound healing, etc. reduce the smooth curvature of the cornea, causing regular changes in the ocular surface; ④ Intraoperative microscope light irradiation and phacoemulsification energy cannot be used Avoid thermal damage to the ocular surface.

2) Drug factors: ① Preoperative topical anesthetics reduce corneal sensitivity and reduce reflex blinking; ② Use of topical anesthetics during surgery will aggravate corneal epithelial shedding and reduce tear film stability; ③ Postoperative antibiotic or hormone drops Excessive use of eye drops can lead to a decrease in the density of conjunctival goblet cells and epithelial squamous metaplasia, affecting the production of mucus components in the tear film. The preservatives in it can also have a toxic effect on the ocular surface and damage the tear film lipid layer.

3) Other factors: ① Meibomian gland pore obstruction and eyelid margin blood vessel filling after surgery may lead to an increase in eyelid esterase and lipase, change the viscosity of meibum, thereby inducing or aggravating meibomian gland dysfunction and meibomian gland inflammation. Cause moderate to severe and long-term dry eye; ② Hormone level imbalance, oxidative stress, anxiety and depression, and systemic diseases are all predisposing factors for dry eye symptoms after cataract surgery.

3. Treatment

3.1. Western medicine treatment

Current Western medicine treatment strategies aim to improve symptoms by suppressing inflammation, increasing deficient components, and stabilizing the tear film, including topical medications and non-drug treatments.

3.1.1. Local drug treatment

1)Artificial tears and substitutes

Artificial tears can restore the tear film structure, improve the regularity of the corneal surface, reduce corneal fluorescein staining and inflammatory factor index levels, and relieve postoperative mild dry eye or suspected dry eye of unknown diagnosis as well as mild dry eye combined before surgery. A number of clinical studies have shown that artificial tears are routinely used before and after cataract surgery to reduce ocular surface tissue damage and reduce the incidence of postoperative dry eye. Clinical observation found that sodium hyaluronate eye drops have the best effect at a solution concentration of 0.3%, and acrylate contains the lipid component of physiological tears, so it can be considered as a priority for patients with abnormal tear film lipid layer; autologous serum can be used as a The best tear substitute can improve corneal nerve damage, restore through nerve regeneration, and effectively treat severe and refractory dry eyes with persistent corneal epithelial defects or in which artificial tears are

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ineffective. In addition, a newly launched eye drop containing 0.2% hyaluronic acid and 0.001% hydrocortisone has also been proven effective in clinical trials for dry eye syndrome caused by cataract surgery[5].

2) Anti-inflammatory and immunosuppressive drugs

Commonly used anti-inflammatory drugs for the clinical treatment of dry eye are corticosteroid preparations and non-steroidal anti-inflammatory eye drops. Low-concentration glucocorticoids can effectively control ocular surface inflammation and reduce conjunctival edema and congestion. The ability of 0.1% fluorometholone eye drops to penetrate eye tissue is lower than other corticosteroids, minimizing potential complications. Loteprednol is a new type of lipid corticosteroid with high fat solubility. It can quickly pass through the cornea and induce phospholipase A2 inhibitory protein to play an anti-inflammatory effect. Studies have proven that the anti-inflammatory effect of this drug is stronger than traditional glucocorticoids. , suitable for moderate to severe dry eye symptoms. As inhibitors of prostaglandin synthase, non-steroidal anti-inflammatory drugs can effectively inhibit postoperative non-infectious inflammation in cataract patients, and can also avoid adverse reactions such as increased intraocular pressure and epithelial growth retardation caused by corticosteroid use. However, long-term use NSAIDs irritate the ocular surface, can lead to slower healing of corneal epithelial damage, and are associated with postoperative keratitis and corneal melt. Therefore, they should be used with caution in postoperative management, and should be avoided when used alone.

Cyclosporine may inhibit the production of cytokines by activated T lymphocytes, thereby reducing ocular surface inflammation and improving tear film stability. Clinical studies have shown that 0.05% cyclosporine A has a good effect in treating dry eye by regulating ocular surface inflammation, increasing conjunctival goblet cell density and reducing epithelial cell apoptosis to a certain extent. In recent years, Ritalast, an inhibitor of leukocyte function-associated antigen 1 (LFA-1) and intercellular adhesion molecule-1 (ICAM-1), has been proven to be effective in treating dry eye symptoms. Overexpression of conjunctival ICAM-1 blocks the combination of ICAM-1 and LFA-1, reduces T cell-mediated inflammatory response, and effectively controls ocular surface inflammation.

3) Tear secretion-stimulating drugs

P2Y2 receptors are widely present in corneal and conjunctival epithelium, goblet cells, meibomian glands, etc., and play an important role in regulating tear and mucin secretion. Diquafosol sodium is a stable P2Y2 receptor agonist that can promote the secretion of aqueous tears and mucin in dry eye patients by activating P2Y2 receptors and Ca2+-dependent chloride channels in corneal and conjunctival epithelial cells and goblet cells. Studies have found that regardless of the degree of corneal and conjunctival epithelial lesions, diquafosol sodium can effectively increase lipid formation and stimulate the production of lipid vesicles in meibomian gland cells[6]. Therefore, it is not ideal for obstructive meibomian gland dysfunction with conventional treatments. Effective for patients.

4) Drugs that promote epithelial repair

Recombinant human epidermal growth factor (rh EGF), basic fibroblast growth factor (bFGF), calf blood deproteinized extract and vitamin A palmitate gel are commonly used clinical epithelial repair drugs for the treatment of dry eye. rh EGF has good permeability, can reduce peroxidized lipid levels, increase superoxide dismutase levels, repair corneal endothelial cells, and inhibit oxidative stress when used in combination[7]; bFGF contains active ingredients that interact with corneal tissue The endogenous components are the same and can effectively repair ectodermal and mesodermal tissues, promote the growth and differentiation of corneal cells, improve wound blood microcirculation and inhibit epithelial cell secretion; calf blood deproteinized extract can lubricate the ocular surface and reduce mechanical friction. At the same time, it can penetrate into the metabolism of ocular surface tissue, reduce or prevent scars caused by inflammatory hyperplasia, granulation tissue degeneration and collagen reorganization; vitamin A palmitate gel can repair the cornea and stabilize tear gland function, and can be effectively relieved when combined with other drugs. Subjective symptoms in patients with dry eye.

3.1.2. Non-drug treatment

1) Lacrimal embolism

For patients whose symptoms are difficult to relieve after drug treatment, punctal embolization can be used to block the tear drainage channel, increase the amount of tears on the ocular surface and the tear retention time, and punctal embolization has an auxiliary anti-inflammatory effect. For patients with moderate to severe dryness diagnosed clearly before PHACO+IOL surgery, Eye patients can also undergo punctal embolization during surgery.

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2) Corneal bandage lens/scleral contact lens

By maintaining the integrity of the ocular surface and preventing tear film evaporation, corneal bandage lenses can isolate damage from other external factors to the greatest extent, stabilize the tear film while promoting corneal healing and reducing inflammatory reactions. Its good penetration facilitates drug delivery and maintains drug concentration. Scleral contact lenses can also keep the ocular surface of the covered area moist, and are effective in treating moderate to severe dry eyes, reducing patients' dependence on artificial tears without obvious complications.

3) Wet room mirror

Wet room scopes are divided into heated and non-heated types. Both can isolate dry outside air and reduce the evaporation of water on the ocular surface. On this basis, heated wet room scopes increase the temperature to melt meibomian gland lipids and better maintain the ocular surface. Moisture and homeostasis can significantly increase the patient's tear river height (TMH) and prolong BUT.

4) Intense pulsed light (IPL) treatment

IPL improves the eye microenvironment and reduces the level of inflammatory factors on the ocular surface through sterilization, anti-inflammatory, and reduction of Demodex. Its photothermal effect can promote the liquefaction of meibum and dredge the meibomian glands. Through clinical research, Tan Xianggao et al. found that IPL combined with meibomian gland massage has a significant effect in treating dry eye after cataract surgery with meibomian gland dysfunction.

3.2. Integrated Traditional Chinese and Western Medicine Treatment

In recent years, many practitioners of integrated traditional Chinese and Western medicine have done a lot of research on the use of traditional Chinese medicine in the treatment of dry eye, which can fundamentally improve patients' dry eye symptoms and has good safety.

3.2.1. Single Chinese medicine extract combined eye drops

Flavonoids have androgen-like chemical structures and effects, and can combine with androgen receptors to produce androgenic effects. Relevant studies have shown that Chinese medicinal materials such as Buddleja, chrysanthemum, pilosa, and mistletoe contain flavonoids, which can bind to androgen receptors in the lacrimal glands of animal models and increase the number of receptors, inhibiting the expression of inflammatory factors in tears. Improve tear secretion and tear film stability. The total flavonoids of Buddleia japonica and chrysanthemum can also inhibit the apoptosis of lacrimal gland epithelial cells and increase tear secretion; Pleurotus pilosa contains a large amount of choline, and mistletoe contains theophylline, both of which can cause tearing and prevent the worsening of dry eyes to a certain extent. Its extract eye drops or granules, water decoction iontophoresis combined with local eye drops of western medicine can be used clinically to treat dry eyes caused by sex hormone disorders[8].

3.2.2. Traditional Chinese medicine decoction combined with eye drops

1) Replenish liver and kidney, nourish yin and promote fluid production

The eyes are the orifices of the liver, the kidneys control water and store essence, and the liver and kidneys have the same origin, and essence and blood are produced at the same time. Liver and kidney yin deficiency will lead to insufficient essence and blood and loss of nourishment of the eyeballs. In addition, because most cataract patients are elderly, liver and kidney deficiency is a serious problem. Due to its physiological characteristics, liver and kidney yin deficiency, body fluid metaplasia and abnormal distribution are often considered to be the basic pathogenesis of dry eye after cataract surgery. Liver and kidney tonic decoctions are highly used in the clinical treatment of dry eye after cataract surgery.

The method of nourishing kidney yin and nourishing liver yin refers to the method of nourishing kidney yin to nourish liver yin. Hu Xiaojin and others used the method of nourishing water and mulching wood to prepare a Chinese medicine prescription to treat 40 cases of dry eye with liver and kidney yin deficiency after cataract surgery.[9]The results showed that eye drops can On the basis of local eye drops combined with the method of nourishing water and mulching wood, a self-made decoction can more effectively improve the symptoms of dry eyes. Qu Lin et al. observed the efficacy of modified Yangyin Yiqi Decoction in 52 patients with dry eye after cataract surgery. After one month, the total effective rate of the combined treatment group with traditional Chinese medicine reached 90.38%, and the ocular surface condition was better than that of the group without traditional Chinese medicine. Kou Lieling et al. used self-made nourishing yin, eye-improving tea, fumigation and tea drinks combined with sodium

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hyaluronate eye drops to treat dry eye patients diagnosed with liver and kidney yin deficiency syndrome during the perioperative period of cataract.[10]The results showed that the tear secretion of the fumigation tea drink group combined with traditional Chinese medicine was and BUT time were more effective than the sodium hyaluronate group alone. The traditional Chinese medicine preparation Qingrun Yangmu Oral Liquid developed by Professor Zheng Yanlin is based on the optimized formula of traditional Chinese medicine theory, and combined with artificial tears can effectively improve the tear film stability of the eye surface and corneal epithelial damage in patients after cataract surgery.

Modern pharmacological research believes that Liuwei Rehmannia Decoction may improve the patient's internal environment by stimulating the secretion of hormones in the central nervous system of the hypothalamus, and Cornus officinalis, Rehmannia glutinosa, Mudan Bark, and Alisma have anti-inflammatory and antibacterial effects, Tang Jinfei said. Clinical studies have found that Liuwei Dihuang Pills can significantly improve the subjective symptoms and objective indicators of dry eye patients with liver and kidney yin deficiency, and increase the patients' estradiol levels. Qiju Rehmannia Decoction is a modified prescription of Liuwei Rehmannia Decoction. It has the effects of nourishing the liver and kidneys, nourishing yin and promoting fluid production, clearing away heat and improving eyesight. It is a commonly used prescription in the clinical treatment of dry eye syndrome due to liver and kidney yin deficiency. Some scholars have found that Qiju Dihuang Pills combined with traditional Chinese medicine fumigation can effectively reduce oxidative stress damage after cataract surgery, reduce the level of inflammatory factors in patients' tears, increase the level of lysozyme, and accelerate eye repair. [11]Zhen Siyuan et al. used meta-analysis method to analyze the data of 13 documents and 1363 patients and concluded that the clinical effect of modified Qiju Dihuang preparation combined with Western medicine in the treatment of dry eye after cataract surgery is better than that of Western medicine alone.

2) Replenish liver and kidney, remove heat and remove blood stasis

Many other doctors believe that the invasion of wind-heat evil energy through surgical incisions will lead to sluggish circulation of qi and blood. Therefore, on the basis of tonifying the liver and kidneys, they add wind-dispelling and blood-activating drugs to increase the efficacy. Chen Daixi et al. used Qiju Dihuang Decoction as the basic formula, adding Ligusticum Root and Radix Fern, which are pungent and dispelling wind, and Red Peony Root and Mudan Bark, which are cooling blood and dissipating blood stasis. It not only replenishes the liver and kidneys, but also unblocks Qi and blood, achieving the purpose of treating diseases and seeking the root cause. Meng Xianyi et al. treated 39 patients with dry eye after cataract surgery with dialectical liver and kidney yin deficiency type using modified Chufeng Yishang decoction combined with polyvinyl alcohol eye drops. The total effective rate reached 94.87%, and the level of inflammatory factors in tears was low. In the control group, the BUT and SIT values were higher than those in the control group.

3) Other syndrome types and treatments

There are few clinical observations on the use of traditional Chinese medicine for dry eye syndrome after cataract surgery. Bai Yunxiao, Yuan Mingru and others studied the use of conventional artificial tears in patients with dry eyes after cataract surgery.[12]On the basis of eye drops treatment, the syndrome is divided into lung yin deficiency type, liver and kidney yin deficiency type, and spleen and stomach dampness and heat type. Different syndrome types are supplemented with corresponding traditional Chinese medicine decoctions. The results show that TCM syndrome differentiation combined with eye drops can effectively improve cataracts. Postoperative dry eye symptoms and increased tear secretion. Wang Limeng and others used the self-made Chinese medicine prescription Shaoyang Runmu Yin fumigation and oral administration combined with artificial tears to treat patients with dry eye Shaoyang stagnation heat syndrome after cataract surgery, and the efficacy was significantly better than the artificial tears alone group; Huang Wengang self-made Xuan Tong Xuan based on Xuanfu theory The prescription was dialectically added and subtracted based on the characteristics of different perioperative symptoms of cataract, and combined with anti-inflammatory eye drops, it was effective in treating 80 dry eye patients who underwent cataract phacoemulsification surgery.

3.3. External treatment with traditional Chinese medicine

3.3.1. Traditional Chinese medicine fumigation and meibomian gland massage

The atomization and fumigation administration route of traditional Chinese medicine is unique. It can directly contact the cornea and conjunctiva, quickly and significantly achieving the purpose of reducing eye inflammation and improving dry eye symptoms. It can also be added or subtracted according to different syndrome differentiation of patients, whether it is a single medicinal material or a Chinese

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medicine compounds can achieve good results. Wild chrysanthemums, chrysanthemums and other eye fumigation drugs with high clinical use rate can clear the liver and improve eyesight. The aromatic properties of borneol and mint can lead the medicine to the eyes; according to the patient's symptoms, add corresponding traditional Chinese medicine, such as adding Prunella vulgaris, skullcap, etc. increase the effect of clearing heat and detoxifying, and are used for those with excessive heat; Ophiopogon japonicus, rehmannia root, etc. nourish yin, promote fluid and moisten the eyes, and are used for those with fluid deficiency. Some results showed that the traditional Chinese medicine fumigation therapy can effectively prolong BUT, increase tear secretion, and improve symptoms.

Relevant studies have shown that the meibomian gland function of patients after cataract surgery has been impaired even if the tear film parameters of the ocular surface do not change significantly. Meibomian gland massage improves lipid quality and quality by clearing the meibomian gland channels, thereby reducing tear film water evaporation and maintaining tear film stability. Before performing meibomian gland massage, it is often combined with local hot compress, fumigation, etc. to increase the temperature around the eyes to achieve the desired effect. The melting point of eyelid lipids promotes lipid flow and enables massage to achieve better results. Ma Chun et al. showed that the symptom score and FL score of dry eye patients after cataract surgery who received meibomian gland massage were significantly reduced, and the BUT value was significantly increased. Zuo Jianxia et al. proposed that the combination with traditional Chinese medicine for eye smoke can reduce the number of meibomian gland massages, relieve the pain caused by massage, and promote the normal secretion of meibomian glands.[4] In addition, patients with meibomian gland dysfunction can undergo routine eye fumigation and massage before surgery to maximize the patient's postoperative ocular surface condition and speed up recovery.

3.3.2. Traditional Chinese Medicine Iontophoresis

The eye collaterals are the eye branches of the collaterals. They are thin and prone to stasis and stasis. Once evil energy enters the collaterals, it is difficult to eliminate. Traditional Chinese medicine acupoint iontophoresis combines modern technology with traditional Chinese medicine meridian theory to accelerate blood circulation in acupoints and tissues around the eyes, allowing the skin to quickly absorb the medicine and maintain a high concentration for a long time. Some clinical studies used iontophoresis to treat dry eye syndrome after cataract surgery using homemade prescriptions (chrysanthemum, licorice, prunella vulgaris, angelica root, mint, and bupleurum). The results showed that the effect of the iontophoresis group was much better than that of the artificial tears alone group, patients with dry eye syndrome after cataract surgery had significant improvements in various objective indicators after 14 days of using Salvia miltiorrhiza injection iontophoresis, and its efficacy is much higher than that of ordinary topical drugs.

3.4. Acupuncture treatment

Acupuncture has multiple advantages such as multiple targets, easy operation, and harmonization of yin and yang. As a unique traditional Chinese medicine method, acupuncture is widely used in the treatment of dry eye after cataract surgery. Under the guidance of traditional Chinese medicine and meridian theory, dialectical and local acupoint selection can regulate spirit energy, dredge meridians, and stimulate the circulation of meridian qi and blood. Local acupuncture can also inhibit eye inflammation, stimulate eye nerves, and promote lacrimal gland secretion, etc. Effectively relieves subjective symptoms and can be used as a sole or auxiliary intervention in the treatment of dry eye syndrome. Although it remains an open question whether acupuncture treatment is equally effective in post-cataract surgery dry eye syndrome and classic dry eye syndrome, a large number of clinical studies and previous meta-analyses have shown that acupuncture treatment is effective in post-cataract surgery dry eye syndrome.

Acupuncture acupoint selection is mostly based on acupoints around the eyes (Jingming, Taiyang, Tongziliao, Sizhukong, etc.), combined with dialectical acupoint selection. Yang Haiting et al. clinically observed the efficacy of acupuncture combined with artificial tears in the treatment of dry eye patients after cataract surgery[13]. The treatment group received acupuncture every other day from 3 days before surgery to 21 days after surgery (acupoints selected: Cuanzhu, Sizhukong, Taiyang, Si Bai, Fengchi, Hegu, Guangming, Ganshu, Shenshu, Sanyinjiao), the results showed that the acupuncture combined with artificial tears group had good symptom scores, SIT, BUT and corneal fluorescence staining scores (FSC) on 1d, 7d, and 21d after surgery. Better than artificial tears alone or acupuncture alone. Pan Yajie et al. observed the acupuncture effects of 17 cases (20 eyes) of dry eye patients after cataract phacoemulsification from 3 days before surgery to 20 days after surgery (point selection: Cuanzhu, Sizhukong, Taiyang, Sibai, Ganshu, Shenshu, Guangming, Fengchi, Hegu, Sanyinjiao) found that

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conventional anti-inflammatory combined with acupuncture treatment can significantly increase the patient's tear secretion, and the therapeutic effect is better than that of the anti-inflammatory treatment group alone. Zhao Jing et al. found that acupuncture can inhibit the activity of inflammatory factors such as IL-1, IL-6, and TNF-α, and can also increase the level of lactoferrin (LF) in patients' tears and enhance the antibacterial and immune capabilities of the ocular surface.[14]Jiang Ying et al. achieved good results in the treatment of dry eye with meibomian gland dysfunction by using Fengchi three-needle method on the basis of selecting acupoints around the eyes. Therefore, acupuncture has a good effect on patients with dry eye after cataract surgery[15].

4. Conclusion

To sum up, dry eye after cataract surgery is caused by a combination of multiple factors. Traditional Chinese medicine has no unified standard for treatment due to its unique dialectical treatment. However, the treatment mainly focuses on "Yin deficiency", "Jin deficiency" and "blood stasis". , "dry heat" and other aspects of treatment. The combination of traditional Chinese and Western medicine can treat both the symptoms and the root causes, reduce the time and dosage of local eye drops, reduce toxic and side effects, and improve the efficacy. Clinical workers should explore more effective combined treatment methods of traditional Chinese and Western medicine to minimize patients' subjective discomfort after surgery and improve patient satisfaction after surgery.

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