The Experience of Professor Tong Jing'an in Treating Age Related Macular Disease

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Li Zhang¹, Tong Jing'an^{2,*}

¹Shaanxi University of Traditional Chinese Medicine, Xianyang 712000, China ²The First Clinical Medical College, Shaanxi University of Traditional Chinese Medicine, Xianyang 712046, China

*Corresponding author

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Abstract: This paper sums up the clinical experience and methods of professor Tong Jing'an in the treatment of age-related macular degeneration. We can provide some new ideas for the treatment of age-related macular degeneration. I talk about professor Tong's understanding and view on age-related maculopathy through the clinical study with the teacher, consulting the relevant literature and understanding the thoughts of the tutor. The effect of the combination of traditional Chinese and Western medicine used by professor Tong in the treatment of age-related macular degeneration is better than that of western medicine. It can more effectively reduce the clinical symptoms of patients, improve visual function and reduce complications. This way can promote the academic thought of traditional Chinese medicine ophthalmology and clinical diagnosis and treatment, which is worth popularizing in clinical application.

1. Introduction

Age-related macular degeneration (AMD) [1] is the most common clinical ocular fundus degeneration in middle-aged and elderly people. The incidence rate also gradually increases with increasing age. Its main clinical manifestations are irreversible and progressive deterioration of central visual acuity. In wet macular degeneration, we can see bleeding, edema and exudation between the pigment epithelium of the retina and the neural epithelium [2]. Sometimes we will discover that wet age-related macular degeneration can be finally transformed dry macular degeneration after repeated intravitreal injection of Eylea. Macular area can see atrophy or cystic degeneration of pigment epithelium. Tong professor uses Tongmaizengshiyin add and subtract to treat of macular degeneration. It can promote the absorption of hemorrhage and edema combined Chinese and western medicine treatment. The way will effectively protect the patient's existing vision and improve the long-term vision and visual function. And it will improve the quality of life of patients and reduce the patients pain and reduce the complications. The curative effect is better, which is worthy of promotion to use.

2. Etiology and Pathogenesis

AMD belongs to "Zhizhanhunmiao" of Traditional Chinese medicine [3]. The disease is closely

related the age change. When the female is about forty, three Yang pulse runs out of failure on the head and face. However the male 40 years old, they show kidney qi failure, increasingly insufficient liver and kidney. Kidney essence and liver blood manifest metaplasia without source that can not be transported up to the eye, which coupled with the spleen and stomach weakness and lucid yang failing to rise. The macula cannot be nurtured and moistened by the spleen. And long illness distributes into collaterals and form congestion. Finally, water stasis mutual knot. Zhang Jingyue said "body fluid condensed or blood coagulated all will turn into sputum". Therefore, phlegm and blood stasis mutually knot in the eyes and collaterals, which will result in bleeding, edema, exudation, atrophy and other changes. The basic pathogenesis of AMD is liver and kidney insufficiency, spleen and stomach weakness. It is secondary that phlegm and blood stasis obstruct the eyes and collaterals. Western medicine believes that fragments deposited on the basal layer of Bruch's membrane increase with age, which are metabolites excreted by retinal pigment epithelium (RPE) and deposited on the inner layer of Bruch's membrane forming vitreous membrane verruca [4]. The occurrence of this disease attributes to decrease retinal photosensitivity including the destruction of RPE and material exchange and metabolism of choroid capillaries. Other common factors are race, genetics, systemic conditions, social factors and environmental factors, etc [5]. The main etiology includes inflammatory immunity, neovascularization, oxidative stimulation factors and aging factors. Clinically, prevention and treatment can be given for different causes to reduce the incidence of AMD.

3. Syndrome Differentiation and Treatment

In the treatment of this disease, Professor Tong Jing'an takes the principle of disease differentiation first and then syndrome differentiation. He adheres to the combination of syndrome differentiation and disease differentiation, starting from the overall concept and treats the syndrome differentiation. This disease begins with a normal eye appearance, mainly because the patient comes to the clinic with perceived visual impairment. Fundus fluorescein angiography (FFA) demonstrates retinal neovascularization in wet macular degeneration and vitreous membrane warts in dry macular degeneration. Professor Tong believes that dry macular degeneration should be treated from the spleen and kidney, not only from a certain viscera. "Traditional Chinese medicine thinks "old age treats the spleen". With the increase of age, the main manifestation of the human body is the decline of the kidney, the deficiency of kidney qi and kidney Yang lost in warm. The lack of vitality will cause the inability to carry blood. The blood is blocked because it cannot be carried properly, accumulation of phlegm, blood stasis and other tangible evil, blocking the arteries, the eyes lost glory. The main clinical changes are atrophy of macular retinal pigment epithelium and the appearance of vitreous membrane wart, without hemorrhage, exudation, edema and neovascularization. Wet agerelated macular degeneration is mainly due to old body failure, deficiency of zang fu organs and spleen and kidney, lack of source of qi, blood lead to slow running, blood stasis causes blood does not follow the meridian, blood overflow vein, so that bleeding, exudation, etc. A sudden decline in vision led to blindness. Typical changes are the formation of subretinal neovascularization, bleeding, exudation, callus and other changes can be seen in the fundus. Patients with excessive bleeding may see preretinal hemorrhage or even vitreous hematocele. This disease has a very large impact on the central vision, seriously affecting the patients' life and work.

4. Case verification

Xu mou, male, 78 years old. Initial visit on 11 November 2021. The chief complaint was sudden blurred vision, deformation and discoloration of right eye for 2 months. The patient self-reported that there was no obvious cause before 2 months, and suddenly the vision of the right eye was blurred, deformed and discolored, and there was no red eye or eye pain. He was diagnosed as "right eye age-

related macular degeneration" in our hospital. Since the onset of the disease, the patient can eat well, rest at night, urinate normally, dry stool. Specialist examination showed visual: OD=0.15, OS=0.25; Intraocular pressure: Tn. No swelling of both eyelids, no hyperemia of the conjunctiva of the eyelid, complete transparent cornea, anterior chamber (-), normal iris texture and color, pupil diameter of 3mm, normal response to light. The crystal cortex of the right eye was cloudy, the fundus was blurred, the optic disc was orange, the boundary was clear, and patchy bleeding could be seen below the macular area. The left eye was opaque under the posterior capsule of the lens, and the fundus was blurred. The optic disc was orange with clear boundary, and the middle macula was unclear. No bleeding or exudation was observed in the omentum. Auxiliary examination revealed detachment of the nerve superior cortex in the macular region of the right eye, interlamellar splitting, visible patchy hyperreflectance foci, and visible subomental hemorrhage of OCT (our hospital, November 11, 2021). Left optic disc with vitreous insufficiency and detachment. The basic treatment is eliminating phlegm and dampness, removing blood stasis and dredging collaterals. The prescription was selected as Tongmaizengshiyin plus or minus treatment. The composition of prescriptions are: Pueraria root 30g, Sophora rice 30g, Suoluozi 15g, Panax notoginseng powder 3g, Pinellia ternata 15g, Tangerine peel 12g, Tuckahoe 20g, bran stir-fried Stiff Silkworm 12g, Chuanxiong 15g, Huai Niuxi 12g, Thunberg fritillary bulb 15g, raw Oyster 15g, Huangjing 15g, Salt plantain seed 15g, Salt aster seed 15g. A total of 7 doses, one dose a day, 300ml fried in water in the morning and evening temperature, oral administration.

On the second visit, the patient self-reported that his vision was clearer than before. His tongue was light, his coating was thin and white, and his pulse was smooth. Specialist examination showed that the fundus hemorrhage was better than before. Vision: OD=0.2, OS=0.3; Intraocular pressure: right eye: 8.5mmHg, left eye: 10mmHg.No swelling of both eyelids, no hyperemia of the conjunctiva of the eyelid. And cornea is complete and transparent, anterior chamber (-), normal iris texture and color, pupil diameter of 3mm, good response to light. The lens cortex of the right eye is cloudy. The fundus is blurred. The optic disc is orange in color and has a clear border. Patchy bleeding is seen below the macula area. The left eye was opaque under the posterior capsule of the lens, and the fundus was blurred. The optic disc was orange with clear boundary. The middle macular reflection is not clear. No bleeding or exudation was observed in the omentum. On the basis of the original formula, cassia seed 10g, chrysanthemum 10g.Clear liver, clear eyes and clear collaterals. The patient was advised to continue taking 7 doses of Traditional Chinese medicine.

Three diagnoses, the patient's vision improved significantly. His tongue was light, the coating was thin and white, and his pulse was smooth. Specialist examination showed that the fundus hemorrhage was basically absorbed. The patient continued to take the previous prescription, 7 doses. Two months later, the patient was asked for outpatient review. The patient had better vision. Fundus exudation and hemorrhage were absorbed. Ask the patient to take two more weeks to consolidate treatment.

5. Conclusion

This disease belongs to the category of traditional Chinese medicine ophthalmology "vision zhanhun mu discernible". According to the Criterion of Zheng Zhi, "If a person is more than fifty years old and falls into eyesight. Even after treatment, the light won't come back. The real qi is gradually declining, thus the eyesight gradually decreases. "There are many reasons why it can't be seen. There is nervous fatigue, there is less blood, there is weak vitality, there is kidney sperm loss. "The occurrence of this disease is closely related to age. The patient's mood is not comfortable. Liver qi stagnation leads to blood stasis. Wood can not run that will lead to soil blockage. The spleen can not operate normally, there will be water and wet siltation. When moisture clumps together, it forms phlegm. Phlegm and stasis stick to each other, so the fundus can see bleeding. Tongue light, thin white

and greasy moss, pulse string slippery. Radix puerariae is the king's medicine. Its function is to promote gi and blood circulation and breed body fluid. Panax notoginseng can treat any symptoms about blood, when hemostasis will not stay blood stasis and removing blood stasis will not damage vital qi. Suo Luo zi can adjust qi and run stagnation. The movement of qi will draw the movement of blood. The medicine of line qi can lead the medicine of activating blood to arrive fundus sick place. The function of Sophorae is to promote qi, blood circulation, and dredge channels and collaterals. All three of them are ministers of this prescription. Pinellia ternata, tangerine peel and Poria cocos are the adjuvant of this prescription. Their role is to strengthen the spleen, dry dampness, resolve phlegm and remove blood stasis. Stir-fried silkworm with bran can dissipate phlegm and disperse knot. Ligusticum chuanxiong is a kind of meridian medicine, which can make the medicine reach the lesion site. Raw oyster, achyranthes bidentata and huangjing can nourish kidney Yang and kidney Yin. The effect of Thunberg fritillary bulb is to reduce phlegm and relieve cough. The function of salt sand aster seed and salt plantain seed is to remove phlegm and clear the eyes. During the second diagnosis, the patient self-reported that her vision was clearer than before. Her tongue was light, her moss was thin and white, and her pulse was smooth. Cassia seeds and chrysanthemum were added to the last recipe to clear the liver and clear the eyes. During the third diagnosis, the visual acuity of the patient improved significantly. The tongue was light, the moss was thin, and the pulse was floating. Fundus hemorrhage was found to be basically absorbed when specialist examination. The tutor told the patient to continue taking the last prescription. Two months later, the patient was asked for outpatient review. The patient's vision was stable and the fundus condition was good at re-examination.

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