

Integrated Chinese and Western Medicine for the Treatment of Acne Associated Blepharokeratoconjunctivitis Case 1

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Abstract: This article reported a case of acne associated blepharokeratoconjunctivitis (BKC) in a young woman. During her pregnancy, to reduce the systemic use of drugs due to its side effect, localized eye drop, oral administration of Chinese medicine, and fumigation treatment were adopted. In integrated Chinese and Western medicine treatments, localized treatment simultaneously with the intrinsic conditioning of the patient's physique could treat both the symptoms and root causes of disease. It can effectively improve clinical efficacy, shorten the course of the disease, and reduce patient suffering and recurrence.

Keywords: *acne; blepharokeratoconjunctivitis; integrated Chinese and Western medicine treatments*

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0 Introduction

The patient was a 28-year-old woman. During her pregnancy, she attended the outpatient clinic due to redness in the eye, pain, and blurred vision for half a year. The patient was treated several times in another clinic with the given antivirus, antibiotics, and hormone eye drops which are not effective. The visual acuity was 0.4 in the right eye and 0.3 in the left eye when coming to our clinic for examination. There was conjunctival vessel congestion in both eyes, and the opening of the meibomian gland was plugged up by fat. Scaly skin and toothpaste-like discharges were visible when squeezing the meibomian gland. Conjunctival

hyperemia was evident, corneal opacity and neovascular infiltrate were observed. Aforementioned symptoms combined with facial acne without obvious abnormalities were diagnosed as acne associated blepharokeratoconjunctivitis (BKC).

Consider the patient's pregnancy, the treatment plans are as follows: (1) Meibomian gland massage on both eyes (every 2 weeks); (2) Prapofen (4 times a day), sodium hyaluronate eye drops (3 times a day), tobramycin eye drops were applied 4 times a day on both eyes; (3) Chinese medicine of *si wu shuang pi tang* as prescribed (12 g of *sheng di*, 10 g of *bai shao*, 15 g of *dang gui*, 6 g of *chuan xiong*, 10 g of *sang bai pi*, 10 g of *huang qin*, 10 g of *di gu pi*, 12 g of *chan tui*, 12 g of *jie geng*, 6 g of *xu chang qing*, 10 g of *bai mao gen*, and 6 g of *gan cao*) to be taken orally, fumigated and hot wet compressed. Usage: Take 200 mL following water decoction and serve warm twice in the morning and evening. Dregs of decoction can be added into water and heated to fumigate, and hot wet compress for 3 times a day for 10 min each time.

The symptoms were ameliorated after 1 week of treatment. Reexamination: The visual acuity was 0.6 in the right eye and 0.6 in the left eye. The conjunctival vessel congestion was relieved, the conjunctival hyperemia was alleviated, and the corneal vascular neovascularization was partially resolved. Facial acne was relieved too.

The treatment was continued for 1 week, the patient's binocular vision was 0.8, and the palpebral margin was clean. The conjunctival hyperemia was relieved, and the vasospasm subsided. However, the cornea was still slightly turbid. Acne was significantly ameliorated.

Continue using the Chinese medicine of *si wu shuang pi tang* after decoction and fumigation to wash eyes for a week. Review: Symptoms are basically recovered. The patient was followed up for 1 year without recurrence.

1 Discussion

BKC is the abbreviation of keratoconjunctivitis caused by blepharitis. Blepharitis causes ocular surface irritation and damage through mechanical stimulation, bacterial metabolites, and abnormal lipids, leading to inflammation and immunized keratoconjunctival tissue, which then induces epithelial damage, matrix infiltration, and ulceration^[1]. This disease is related to blepharitis marginalis and chronic conjunctivitis in traditional Chinese medicine. Long-term exposure to wind and dust or smoke and other stimuli addicted to fat and savory food, pathogenic factors or evil *qi*, and evil heat at the lungs and meridian, the failure of relieving superficialities which hinder the flows of *qi* and blood could lead to diseases in the long term. BKC diagnostic criteria: (1) Obvious blepharitis, (2) recurrent episodes or prolonged course of the disease, and (3) the presence of conjunctival hyperemia, follicular and papillary hyperplasia, follicular keratoconjunctivitis, corneal epithelial erosion, stromal infiltration, ulceration, neovascularization, and even corneal perforation^[2]. BKC staging: Early stage: Lower periphery of cornea suffers superficial punctate lesions. The lesion gradually affects the center of the corneal limbus which leads to superficial neovascularization. Some patients may suffer filamentary keratitis or peripheral corneal infiltrate. Developmental stage: Multifocal epithelial or superficial stromal infiltrate present at the lower peripheral cornea area results in marginal ulcers or infiltration of corneal neovascularization, which is obvious and there is often focal infiltration at the end. A longer course of the disease can form vasospasm, and prolonged unhealed of ulcer can subsequently become bacterial or fungal keratitis. Scar staging: Formation of sheet-like nebula or vasospasm, local thinning of the cornea, and obvious abnormalities of tears^[3]. BKC indexing: Mild: The lesion only involves the corneal epithelial layer, moderate: The lesion involves the corneal stroma and did not involve the optical zone of the cornea, and severe: The lesion involves the corneal stroma and the optical zone of the cornea^[1]. The current recommended treatment options for this disease include eyelids cleansing, massage, topical glucocorticoid eye

drops, antibiotic eye drops, and local use of immune pharmaceutical eye drops if necessary, combined with oral antibiotic^[4]. This patient belongs to the early stage of BKC with a moderate condition. The patient has more facial acne, red and thin yellow fur, and moss-like materials coated on the tongue. Reduce the side effects of hormones and systemic medication, shorten the course of the disease can solve the patient's discomfort as soon as possible during pregnancy. In addition, give local antibiotics, artificial tears, and meibomian gland massage by referring to the current recommended treatment plan. Chinese medicine of *si wu shuang pi tang* is taken orally and the eye is hot wet compressed. The effect of *si wu shuang pi tang* can promote blood cooling, dispel wind, and detoxification. Among them, *si wu tang* can nourish blood and improve blood circulation, and promote the flow of *qi* and remove the stasis. *sang bai pi*, *di gu pi*, and *bai mao gen* can cool the blood and clear away lung heat. *huang qin* and *xu zhang qing* can dispel the wind and eliminate the moisture, pain, and itch relief. *chan tui* clear the wind and heat, eyesight retreat. *jie geng* can ventilate and lift the medicine into the lungs. *gan cao* can coordinate the drugs. Using this differential treatment, the patient is satisfied with the clinical effect of the eyes and face.

2 Summary

The rate of BKC patients in outpatient clinics is increasing, which is easy to miss the diagnosis and misdiagnosis. The patient feels painful and affects the daily work and study life. Therefore, reduce the side effects of hormones and systemic medications, shorten the course of the disease, and adopt an optimized and integrated Chinese and Western medicine to improve clinical efficacy can solve the patient's discomfort in the shortest possible time.

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