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Nursing Experience with Auricular Acupressure in the Treatment of Adolescent Myopia: A Case Report

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Abstract

This paper summarizes the nursing experience of a mild myopia patient treated with auricular acupressure. Based on comprehensive nursing assessment, nursing staff performed acupoint selection according to Traditional Chinese Medicine (TCM) syndrome differentiation and implemented auricular acupressure therapy, while simultaneously enhancing emotional nursing care, dietary nursing care, health education, and other aspects, thereby improving visual acuity in myopia patients and inhibiting the progression of myopia.

Full Text

Nursing Experience in Treating Adolescent Myopia with Auricular Acupressure: A Case Report

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Abstract

This article summarizes the nursing experience of treating a patient with mild myopia using auricular acupressure therapy. Based on comprehensive nursing assessment, nursing staff employed auricular acupressure through syndrome-based acupoint selection in Traditional Chinese Medicine (TCM), while strengthening emotional care, dietary guidance, and health education to improve the patient's vision and inhibit myopia progression.

Keywords: auricular acupressure; adolescents; myopia; TCM nursing

Introduction

The term “myopia” first appeared in *Mu Jing Da Cheng*, while *Zheng Zhi Zhun Sheng · Qi Qiao Men* documented the condition as “neng jin qie yuan zheng” (able to see near but afraid of far). *Su Wen Bing Ji Qi Yi Bao Ming Ji · Yan Mu Lun* summarized the main manifestation as “the eyes can see near but cannot see far.”

Modern medicine classifies myopia as a type of refractive error, primarily characterized by visual fatigue symptoms such as dizziness, eye distension, and blurred distance vision. This occurs because images focus in front of the retina rather than precisely on it [1]. Myopia progression can lead to various complications, including cataract, glaucoma, myopic macular degeneration, and retinal detachment, seriously threatening visual health and even causing blindness [2]. Early intervention and proper guidance are crucial means to inhibit myopia onset and progression, making myopia prevention and control an urgent priority. Chinese medicine has recognized myopia for thousands of years, and external treatment methods are widely applied in clinical practice with remarkable effects due to their unique advantages. Auricular acupressure therapy involves accurately adhering pressure pills to auricular points with adhesive tape to stimulate corresponding acupoints or reactive points on the auricle. Through meridian transmission, this external treatment achieves the effects of dredging meridians, invigorating collaterals, harmonizing qi and blood, and preventing diseases. This article reports the nursing experience of treating adolescent myopia with auricular acupressure through syndrome-based acupoint selection.

1. Clinical Data

The patient was an 8-year-old female who presented with complaints of “blurred vision in both eyes for several months.” Initial examination revealed visual acuity of OD 4.8 and OS 4.7. Intraocular pressure measured 10.7 mmHg in the right eye and 11.2 mmHg in the left eye. Cycloplegic refraction showed: right eye -1.50DS/-0.50DC \times 108° > 1.0; left eye -2.00DS/-0.50DC \times 90° > 1.0. No obvious abnormalities were observed in the fundus. Both pupils were equal in size and round, measuring 3 mm in diameter, with present light reflexes. Four diagnostic findings: clear consciousness, normal spirit, clear speech, normal appetite, normal bowel movements and urination, and poor sleep quality. Tongue was pale with a thin white coating, and pulse was thready.

Family history: Father had high myopia. **Western medicine diagnosis:** Mild myopia in both eyes. **TCM diagnosis:** “Neng jin qie yuan zheng” in both eyes; syndrome differentiation: liver-kidney deficiency.

The patient received auricular acupressure therapy at our hospital’s TCM nursing clinic through syndrome-based acupoint selection. Treatment was administered three times weekly, alternating between left and right ears, for a total

duration of three months with regular follow-up during the treatment period. Post-treatment results showed visual acuity of OD 4.9 and OS 4.9. Intraocular pressure was 11.5 mmHg in the right eye and 12.0 mmHg in the left eye. Cycloplegic refraction showed: right eye $-1.00\text{DS}/-0.50\text{DC} \times 108^\circ > 1.0$; left eye $-1.50\text{DS}/-0.50\text{DC} \times 90^\circ > 1.0$. No obvious abnormalities were observed in the fundus. Comparison of pre- and post-treatment findings revealed no further progression of myopia, improved vision, and better sleep quality.

2. Nursing Care

2.1 Nursing Assessment Visual acuity was assessed using the *Standard Logarithmic Visual Acuity Chart* (GB11533—2011), where uncorrected visual acuity below 5.0 in children and adolescents over 6 years old indicates impairment. Specifically, 4.9 represents mild visual impairment, 4.6–4.8 indicates moderate impairment, and $\$4.5$ represents severe impairment. Based on these criteria, the patient had moderate visual impairment.

Myopia severity was determined by the spherical equivalent (SE) measured after cycloplegic refraction. Myopia is classified into three degrees: (1) Low myopia: $-3.00\text{D} \leq \text{SE} < -0.50\text{D}$ (50–300 degrees); (2) Moderate myopia: $-6.00\text{D} \leq \text{SE} < -3.00\text{D}$ (300–600 degrees); and (3) High myopia: $\text{SE} < -6.00\text{D}$ (above 600 degrees). According to this classification, the patient had mild myopia.

2.2 Auricular Acupressure Therapy

2.2.1 Acupoint Selection Rationale This patient presented with poor sleep, pale tongue, thin white coating, and thready pulse, which were differentiated as liver-kidney deficiency. Following the principle of “few but essential” acupoint selection, the main points selected were Eye, Liver, and Heart, with supplementary points Kidney and Shenmen. The Eye point is a specific acupoint for eye diseases that improves local qi and blood circulation around the eyes and brightens vision. The Liver point was selected because “the liver opens into the eyes.” Kidney was combined with Liver to nourish liver and kidney. Heart was combined with Shenmen to calm the mind and soothe the spirit.

2.2.2 Specific Operation Method The patient was seated. Alcohol swabs were used to clean the auricle. Vaccaria seeds taped with adhesive were applied to auricular points: Eye (central part of the anterior surface of the earlobe), Heart (central depression of the cavum conchae), Liver (posteroinferior part of the cymba conchae), Kidney (inferior border of the inferior crus of the antihelix), and Shenmen (within the triangular fossa, at the inferior and middle one-third junction adjacent to the superior crus of the antihelix). After application, the patient was instructed to repeatedly press the seeds for stimulation three times

daily, 1–2 minutes each time, until achieving a sensation of soreness, numbness, distension, or heat at the acupoints. Treatment alternated between ears, with the adhesive patches removed after 48 hours and the auricles cleaned.

2.2.3 Pressing Methods Three techniques were employed: (1) **Counter-pressure method:** The thumb and index finger pads were placed on opposite sides of the auricle at the acupoint location, applying continuous pressure for approximately 30 seconds per point until mild soreness, numbness, distension, or heat was felt. (2) **Point pressure method:** The fingertip applied intermittent pressure with press-release intervals of about 0.5 seconds, maintaining the same sensation threshold, for approximately 1 minute per point. (3) **Direct pressure method:** The fingertip pressed the seed vertically until distending pain was produced, maintaining pressure for about half a minute, resting briefly, and repeating 3–5 times.

2.3 Comprehensive Nursing Care

2.3.1 Dietary Nursing Daily diet should be balanced without picky eating. Patients should reduce sweets and refined foods while increasing whole grains and hard-textured foods. Supplementation with protein- and calcium-rich foods such as fish, milk, and soy products, as well as vegetables and fruits rich in vitamins and lutein, is recommended [4].

2.3.2 General Nursing Four key aspects were emphasized: (1) Maintain proper posture during reading or writing, adhering to the “three ones” principle: eyes one foot away from books, body one fist away from the desk edge, and fingertips one inch away from the pen tip. Every 30 minutes, take about 10 minutes for distance gazing or rest with eyes closed, which has positive significance for myopia prevention. With electronic devices becoming mainstream learning tools, strictly follow the “20-20-20” rule: after 20 minutes of device use, gaze at something 20 feet away for over 20 seconds [5]. (2) Ensure 2–3 hours of cumulative outdoor activity daily and perform eye exercises morning and evening, which can effectively inhibit myopia onset and progression [6]. (3) Establish good sleep habits with more than 8 hours of daily sleep to relieve eye fatigue and reduce myopia risk [7]. (4) Conduct regular examinations and seek timely treatment for any abnormalities.

2.3.3 Emotional Nursing Health education was provided to the patient and parents to help them correctly understand myopia, reduce psychological burden, improve compliance, and build confidence to facilitate myopia treatment [8]. Close observation of physiological and psychological changes was maintained with regular follow-up.

Discussion

After intervention with the TCM characteristic nursing technique of auricular acupressure alone at our hospital's TCM nursing clinic, myopia progression was effectively inhibited. The patient showed no further increase in myopia degree, achieved vision improvement, and experienced better sleep quality.

The incidence of myopia among children and adolescents in China remains high, imposing a tremendous burden on the nation and its people. Chinese medicine has long-standing interpretations of myopia with relatively complete records on etiology and pathogenesis. Regarding etiology, it proposes both congenital genetic factors described as “myopia caused by inherited constitution” and acquired environmental and behavioral factors summarized as “long-term vision damaging the eyes leading to myopia,” attributing the disease to the liver, spleen, heart, and kidneys. Pathogenesis includes insufficient heart yang restricting the spirit light, and liver-kidney deficiency failing to nourish the eyes. The *Huangdi Neijing·Lingshu* states: “The ear is where all vessels converge” [9]. Auricular points have direct or indirect connections with the physiological functions and pathological changes of the five viscera, six bowels, and whole-body tissues and organs. Therefore, auricular acupressure stimulation can unblock obstructed meridians, regulate rebellious qi and blood, balance yin-yang disharmony, restore organ function, and achieve the therapeutic goal of unblocking meridian qi and blood.

In this case, TCM pattern differentiation identified liver-kidney deficiency. Through syndrome-based acupoint selection, continuous stimulation of auricular points was applied to dredge meridians and regulate whole-body organ function, thereby improving vision while relieving uncomfortable symptoms. From a Western medicine perspective, myopia development is inseparable from visual fatigue onset. Research [10] demonstrates that auricular acupressure can effectively improve visual fatigue symptoms, indirectly proving its effectiveness in myopia prevention and control.

During treatment, medical staff provided timely and effective health education to the patient and parents, correcting poor eye-use habits in daily life. The patient was instructed to develop correct pen-holding and reading postures, reduce near-work time, and cultivate good eye-use habits. Additionally, daily outdoor activities and eye exercises were recommended to relieve eye fatigue. Regular follow-up revealed that the patient could consistently maintain habits beneficial to her condition, thereby better inhibiting myopia progression and achieving superior therapeutic outcomes.

Auricular acupressure for myopia offers definite efficacy without side effects, aligning with green health concepts. It is simple to perform and easy to promote, safe with minimal risk, economical and affordable, and readily accepted by patients. This therapy fully embodies the holistic theory of TCM and the characteristic advantages of pattern differentiation and treatment. However, research on the mechanism of myopia treatment with this method is scarce, and

deeper mechanisms require further investigation. Future clinical studies should adopt larger sample sizes and multicenter designs to observe long-term efficacy, and conduct higher-level, multi-layered, and multi-angle investigations to reveal its mechanisms, making auricular acupressure research for myopia more scientific and better leveraging its role in Chinese medicine.

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