Acupuncture improves optic neuropathy patient vision

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Acupuncture benefits vision for patients with ischemic optic neuropathy. In a recent investigation, acupuncture improved visual acuity and light sensitivity while reducing defects of the visual field for patients with nonarteritic ischemic optic neuropathy (NAION). The researchers note the improvements suggest "that regular and continuous acupuncture treatment contributed to the recovery of the visual function of these patients. This may be because acupuncture promoted the blood circulation of artery in the brain and eyes and around the optic disc." They add, "acupuncture repaired and reconstructed the visual pathways."

Nonarteritic ischemic optic neuropathy is a common optic neuropathy for patients over the age of 50. Risk factors include diabetes and hypertension. Signs and symptoms include unilateral loss of eyesight, visual defects and optic disc swelling or paleness. Researchers from the Department of Ophthalmology at the China-Japan Friendship Hospital and from the Beijing University of Chinese Medicine conducted the study. The researchers note "this is the first report about acupuncture treatment for degenerative damage of the optic nerve caused by NAION."

Acupuncture
Sterile, disposable needles of 0.25 x 40 mm were used. The following acupuncture points were administered for patients:

- BL1 (Jingming)
- EX-HN7 (Qiuhou, M-HN-8)
- GB14 (Yangbai)
- DU19 (Baihui)
- EX-HN1 (Sishencong)
- EX-HN6 (Taiyang)
- GB20 (Fengchi)
- Pizhixue (Qiaoming)
- LI4 (Hegu)
- SJ5 (Waiguan)

Deqi sensation was evoked with manual acupuncture for select acupoints. LI4 and SJ5 were connected with electroacupuncture. Intensity levels were set to patient tolerance between 0.1
mA and 1.0 mA. The electroacupuncture device was set to disperse-dense waves. The acupuncture treatments were 5 times per week for 8 weeks. Needle retention time was 20 minutes per acupuncture session.

The total effective rate for visual acuity improvement after 8 weeks of acupuncture was 81.71%. Mean light sensitivity improved from 17.47 dB prior to acupuncture to 20.34 dB after acupuncture treatment. Mean defect improved from 9.39 dB prior to acupuncture to 6.30 dB after acupuncture treatment. The average latency of the P100 wave also improved with acupuncture treatment.

New cases of nonarteritic ischemic optic neuropathy affect thousands of individuals every year. A study conducted by the Mayo Clinic (Rochester, Minnesota) that was funded in part by Research to Prevent Blindness (New York) indicates that approximately “5,700 new cases of acute nonarteritic anterior ischemic optic neuropathy may be expected to occur each year” in the United States. Current therapies include glucocorticoids, hypotensive drugs, anti-vascular endothelial growth factor, hyperbaric oxygen, and optic nerve sheath decompression procedures.

The recent study conducted by researchers from the Beijing University of Chinese Medicine and the China-Japan Friendship Hospital indicates that acupuncture is a safe and effective treatment modality for NAION. Given the clinical successes documented in the study, additional research investigating the potential synergistic and additive properties of acupuncture combined with conventional therapies may help to develop superior patient treatment protocols.

HealthCMi Courses For Vision
At the Healthcare Medicine Institute (HealthCMi), we provide many acupuncture continuing education courses online for acupuncture CEU and NCCAOM PDA credit. The course Free the Qi and Blood focuses on a variation of the herbal formula Xiao Yao San. One highlight is the formula’s ability to treat eye disorders including diminished vision, glaucoma, retinitis, and hyphema. With appropriate modifications, this formula can effectively treat these vision issues for patients with the following related Traditional Chinese Medicine (TCM) differential diagnoses:

- Kidney Jing Deficiency with Liver Qi Stagnation
- Liver Qi Stagnation with Qi, Phlegm or Blood Stasis
- Liver Yang Uprising
Biomedicine is also included in many HealthCMi acupuncture continuing education courses. For example, the online course Chinese Medicine Dietetics Remedies features a section on the benefits of dietary modifications for patients with macular degeneration. A focus on spinach reveals not only its benefits to vision from a TCM perspective but also from a biomedical perspective. Spinach contains lutein and zeaxanthin, which have been shown to provide benefits for patients with macular degeneration. A sample of this course material is available at HealthCMi. Take a look and enjoy the course materials.

**Acupuncture Point Highlight**

The study by Qin et al. for the treatment of NAION uses a protocolized acupuncture point prescription. The extra acupuncture point Qiuhou is included in the selection. This acupuncture point is located on the inferior border of the orbit at the junction of the lateral 1/4 and medial 3/4 of the infraorbital margin. Often, a notch is palpable on the bone at this acupuncture point.

This point is needled with caution while pushing the eyeball upwards. Only licensed acupuncturists with appropriate training are recommended to use this acupuncture point. The angle of insertion is perpendicular or slightly inferior and needle depth is often 0.5 to 1.0 cun. No manual simulation techniques are applied. Qiuhou benefits vision and is indicated for the treatment of glaucoma, retinitis pigmentosa, strabismus, optic nerve atrophy, myopia, and other eye disorders.

**References:**

Qin, Yali, Wei Yuan, Hui Deng, Zhanmei Xiang, Chao Yang, Xinyun Kou, Shufei Yang, Zhijun Wang, and Ming Jin. "Clinical efficacy observation of acupuncture treatment for nonarteritic anterior ischemic optic neuropathy."

