FREE PAPER PRESENTATIONS
FP09: Glaucoma

FP09-01-GLA

Long-term improvement of visual field with medicinal herbs in normal tension glaucoma

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Purpose: Glaucoma is a progressive optic neuropathy and a leading cause of blindness. While high intraocular pressure often is associated with glaucoma, this eye disease also can occur when intraocular pressure is normal (normal tension glaucoma). Though the exact cause of normal tension glaucoma is unknown, many researchers believe decreased blood flow to the optic nerve may be a factor. This could be caused by narrowing vessels that nourish the optic nerve and/or constrictions of these vessels.

The clinical trial was performed to test the therapeutic effect of medicinal herbs for patients with normal tension glaucoma.

Methods: 16 patients (33-77 yr old) were diagnosed as normal tension glaucoma with intraocular pressure of 8-18mmHg. They were treated with mixtures of 23-28 medicinal herbs prescribed according to the differential diagnosis of traditional herbal medicine. The remedies used for the cases consist of several different ingredients, which have well-established histories of use for treatment of vasospasms, poor blood flow, peripheral edema or intraocular inflammation and are expected to exert their specific effects. Visual field test (Humphrey Field Analyzer) was used to evaluate the effectiveness of the herbal therapy.

Results: Intraocular pressure was not changed with the herbal therapy.

However, visual field test demonstrated that MD (mean deviation) was improved after 4-10 months of herbal therapy in 15 of the 16 patients. In addition, visual fields have been continuously improved for 2~3 years of the herbal treatment.

Conclusions: The results imply that intraocular pressure does not affect the progression of optic neuropathy in normal tension glaucoma. Although the mechanism of improved vision cannot be proven, it is likely that herbal therapy resulted in some reversal of retinal ganglion cell dysfunction.

