Author Response: *Ginkgo biloba* Extract Improves Visual Field Damage in Some Patients Affected by Normal-Tension Glaucoma

We thank Quaranta et al.\(^1\) for their interest in our publication on the effect of *Ginkgo biloba* extract on visual field and contrast sensitivity in Chinese patients with normal-tension glaucoma. We agree that differences in protocol and patient selection between the 2 studies might potentially explain the different outcomes.\(^2\,3\) Racial differences must also be considered.

Regarding the eligibility criteria for intraocular pressure (IOP) in our article,\(^2\) we defined normal-tension glaucoma (NTG) on the basis of maximum IOP \(\leq 20\) mm Hg in both eyes during five consecutive diurnal measurements. Such criteria are widely adopted in clinical trials of normal-tension glaucoma\(^4\) and are generally consistent with the description of the study by Quaranta and colleagues\(^3\) (they report having used IOP measurements “made from 8 AM to 6 PM, every 2 hours by Goldmann applanation tonometer.” No mention is made of nighttime measurements in their original manuscript).\(^3\)

The purpose of recruiting only newly diagnosed NTG patients in our study was to ensure that patients had not been previously treated with Ginkgo biloba extract (GBE), which is common in our setting. While NTG may be progressive, this need not be included among diagnostic criteria. Previous studies\(^5\) have demonstrated that a substantial proportion of NTG patients show no progression in their visual fields within 5 years.

Regarding our not having excluded patients receiving systemic medications, only 2 of the 28 patients enrolled received such treatments (antihypertensive drugs in both cases). Excluding these patients had no effect on our results. Topical pressure-lowering therapy was administered to our patients as it has been proven to be effective in slowing field progression,\(^5\) and we considered it to be the standard of care, which could not ethically be withheld. We are aware of no evidence that concomitant topical medication use interferes with GBE’s effectiveness.

Quaranta et al.\(^3\) mention investigating patients for Raynaud’s phenomenon, but since neither of our studies used this as a criterion for enrollment or reported it as a covariate,\(^1\,3\) this is of uncertain relevance. We found no effect of GBE on either visual field or contrast sensitivity. Our study’s power to have identified a difference as large as that observed by Quaranta et al.\(^3\) was 80%. Thus, we cannot agree that our study did “not allow [us] to conclude that GBE is not effective,”\(^1\) as in this setting GBE treatment was in fact without measurable effect on our main trial outcomes. We must further disagree with the assertion by Quaranta et al.\(^1\) that their data “strongly support” the hypothesis that GBE improves visual field in NTG patients by improving ocular perfusion, as their original article did not in fact measure this parameter. In view of our conflicting results, further studies with longer administration of GBE appear warranted, particularly in view of its widespread use.

**References**


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