Effect of anthocyanoside and ginkgo biloba extract on visual function of normal tension glaucoma with diabetes
Joon Mo Kim, Seong Hee Shim, Yong Woo Lee
Department of Ophthalmology, Kangbuk Samsung Hospital, Sungkyunkwan University School of Medicine, Seoul - South Korea

**Purposes:** This study was performed to evaluate the effect of anthocyanoside and ginkgo biloba extract (GBE) in the patients with normal tension glaucoma (NTG), depending on the presence of diabetes mellitus (DM).

**Methods:** Retrospective analysis was carried out by a chart review of patients with NTG. All patients were performed Humphrey visual field (HVF) test and measured logarithm of the minimal angle of resolution best-corrected visual acuity (LogMAR BCVA) with 6 months interval. Changes of mean deviation (MD), pattern standard deviation (PSD) of visual field and LogMAR BCVA were compared among anthocyanoside, GBE and no medication (control) group. Patients were divided according to the presence of DM.

**Results:** 418 NTG patients, including 151 DM patients, were assigned. BCVA was improved in the anthocyanoside group, in contrast deteriorated in the control group. MD was improved in anthocyanoside and GBE group, but not in control group. PSD was not significantly different in all groups. These results were similar in the patients without DM and the patients with DM.

**Conclusions:** These results suggest that anthocyanoside and GBE may be helpful in improving visual function in some patients with NTG regardless of DM.