



# Glaucoma

## How Korean Red Ginseng could be beneficial on ocular blood flow in patients with glaucoma



### Background



### Theory

#### The effect of Korean red ginseng (KRG) on glaucoma:

Glaucoma, a leading cause of blindness in the world, is a group of diseases characterized by progressive optic neuropathy with a particular pattern of visual field loss. Improving ocular blood flow may help the treatment of glaucoma and favorable effects of ginseng roots on circulation have been reported. In the present study, we assessed the effect of KRG ingestion on ocular blood flow in patients with open-angle glaucoma.



### Method

#### A prospective, randomized, placebo-controlled, double-masked crossover trial:

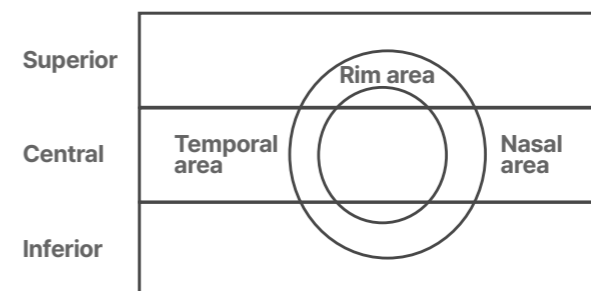
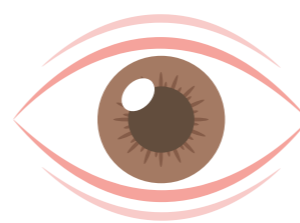
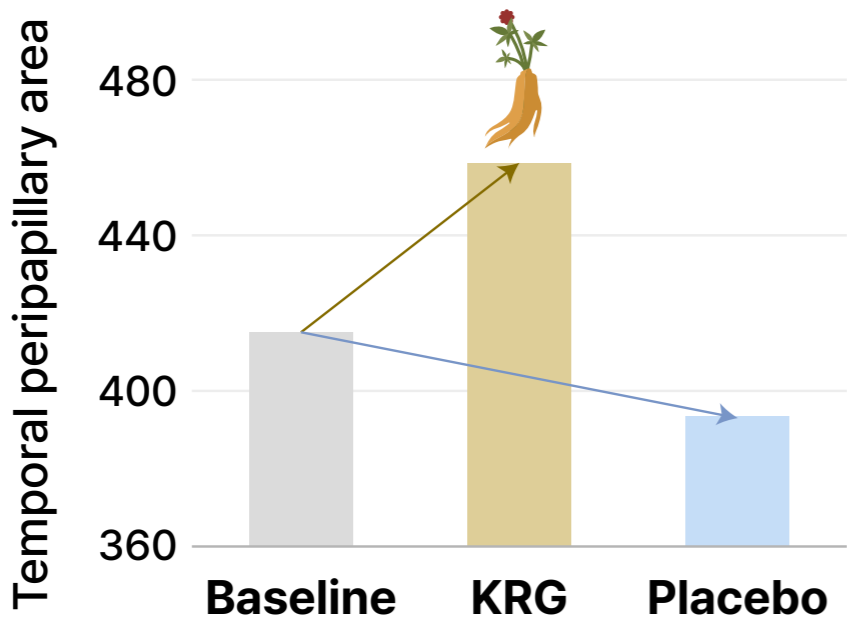
36 open-angle glaucoma patients were randomly assigned to 2 groups: Group A (1.5 g KRG 3 times/day for 12 weeks → wash-out of 8 weeks → placebo treatment of 12 weeks); Group B (same regimen but took the placebo → KRG). Blood pressure, heart rate, and intraocular pressure were measured at baseline and at the end of each phase of the study.



### Outcome

With 36 patients with open-angle glaucoma (Group A (KRG → wash-out → placebo), Group B (Placebo → wash-out → KRG))

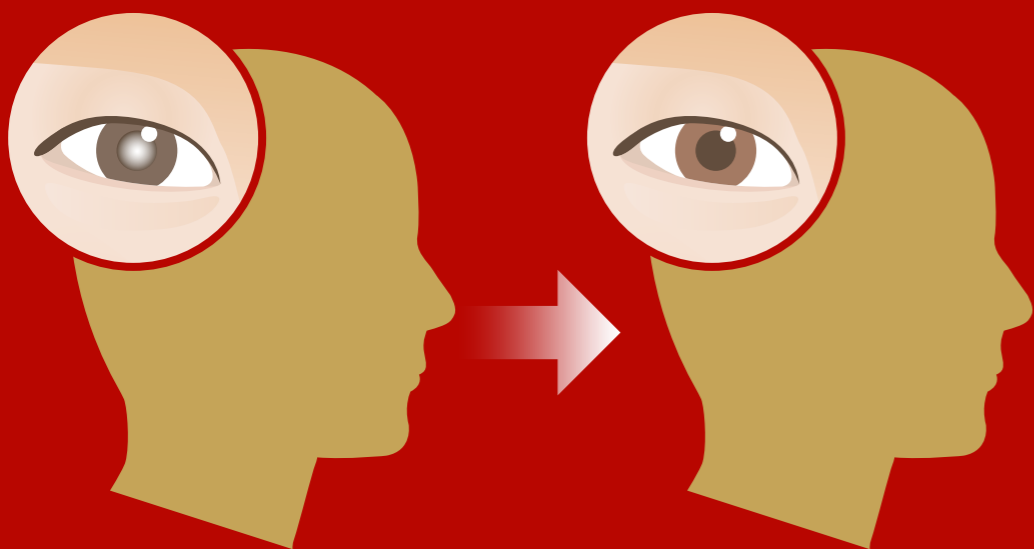
### Retinal blood flow



When pooled KRG group compared with pooled baseline values, a significant improvement was noted in retinal blood flow in the temporal peripapillary area after KRG treatment ( $p = 0.005$ ).

Glaucoma is associated with vascular dysregulation and lower perfusion pressure. Improving ocular blood flow together with reducing intraocular pressure may have a rationale in the treatment of glaucoma.

No significant changes were found in retinal peripapillary blood flow in either the rim region or the nasal peripapillary region.



### Impact



#### Effect of Korean Red Ginseng on ocular blood flow

This study provides evidence that KRG administration can be beneficial for retinal peripapillary blood flow in the temporal area in patients with open-angle glaucoma.

### Conclusion

#### The Effect of Korean Red Ginseng for glaucoma management

KRG ingestion appears to improve retinal peripapillary blood flow in patients with open-angle glaucoma (in the temporal peripapillary areas), **implying that KRG ingestion might be helpful for glaucoma management.**