



Ganglion cell-inner plexiform layer examination can help diagnose glaucoma in high myopia

The Science behind the Tip

Myopia can be associated with significant structural changes in the eye, including peripapillary atrophy, myopic macular degeneration and the enlargement and rotation of the optic disc¹. These were shown to impair the clinical assessment of cup-to-disc ratios, visual fields, and retinal nerve fiber layers², with increased odds of false positive glaucoma diagnoses³.

While most traditional structural and functional tests are affected by these changes, macular ganglion cell-inner plexiform layer (GCIPL) hemifield test was shown to be relatively unaffected by the tilting of the optic nerve head seen in myopia², and Kim et al. have demonstrated its high sensitivity and specificity in diagnosing glaucoma in a context of high myopia⁴. GCIPL hemifield test, however, is not yet commercially available for all optical coherence tomography devices.

References

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