

Clinical Cases

GDx Scanning Laser Polarimeter

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Clinical History

- 72 year old Hispanic male suspected of glaucoma due to cup-to-disc ratio asymmetry
- Highest untreated IOP 24 mm Hg OU
- Anterior chamber angles open OU
- Central corneal thickness
 - 533 microns OD
 - 545 microns OS
- No prior ocular history or surgery
- Good general health except for elevated cholesterol
- No family history of glaucoma

Discussion

This patient had been put on medication two years prior to presentation based on traditional risk factors.

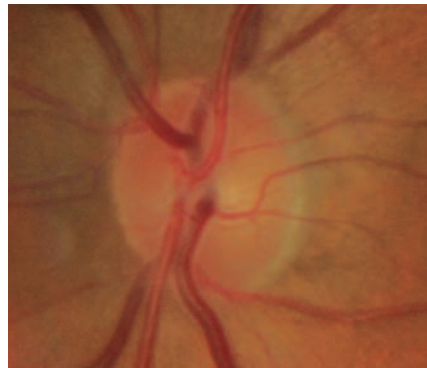
- Asymmetry: Traditionally considered a sign of possible glaucoma. It is assumed that healthy eyes are "symmetric" and that an eye with a larger cup has lost rim tissue.
- This patient has "elevated" IOP, thinner than average corneal thickness OD, and a larger cup OD compared to OS.

However,

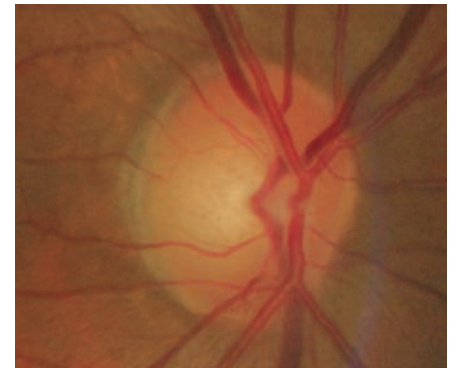
- GDx shows that there is in reality no loss of nerve tissue.
- Visual field testing has been normal OU.

Conclusion

The cup-to-disc asymmetry in this case is actually due to asymmetry in disc size. Treatment was discontinued based upon these findings.

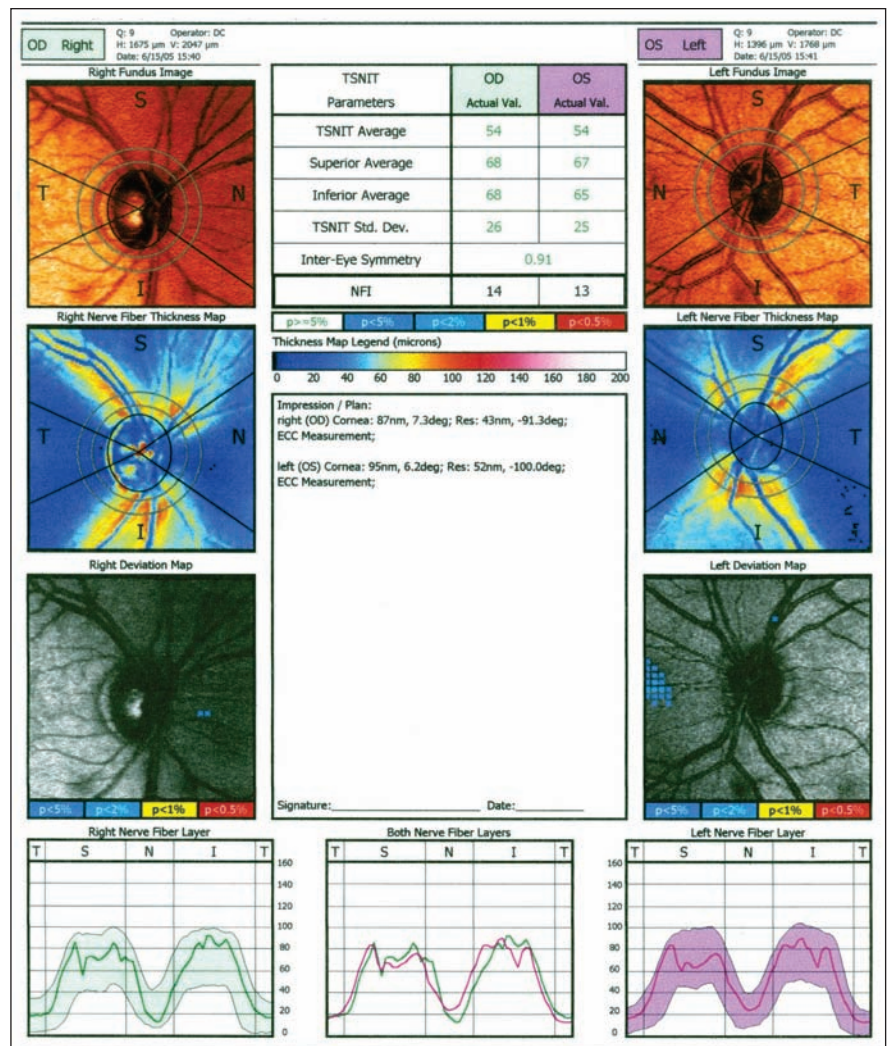


Optic Nerve OS



Optic Nerve OD

Note: Larger cup OD compared to OS



GDx Printout