

Non-arteritic anterior ischemic optic neuropathy (NAION)

Category(ies): Neuro-ophthalmology

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45-year-old man who awoke with left sided inferior visual field loss.



The right eye showed a structurally congested optic disc without edema or pallor. (Fig. 1)

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Fundusoscopic examination showed optic disc edema in the left eye that was more prominent inferiorly along with RNFL hemorrhages. (Fig. 2)

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Six months later, he presented with decrease in vision in the right eye with right optic disc edema involving the superior part of the optic disc. (Fig. 3)



Left eye at that time showed superior segmental optic disc pallor. (Fig. 4)

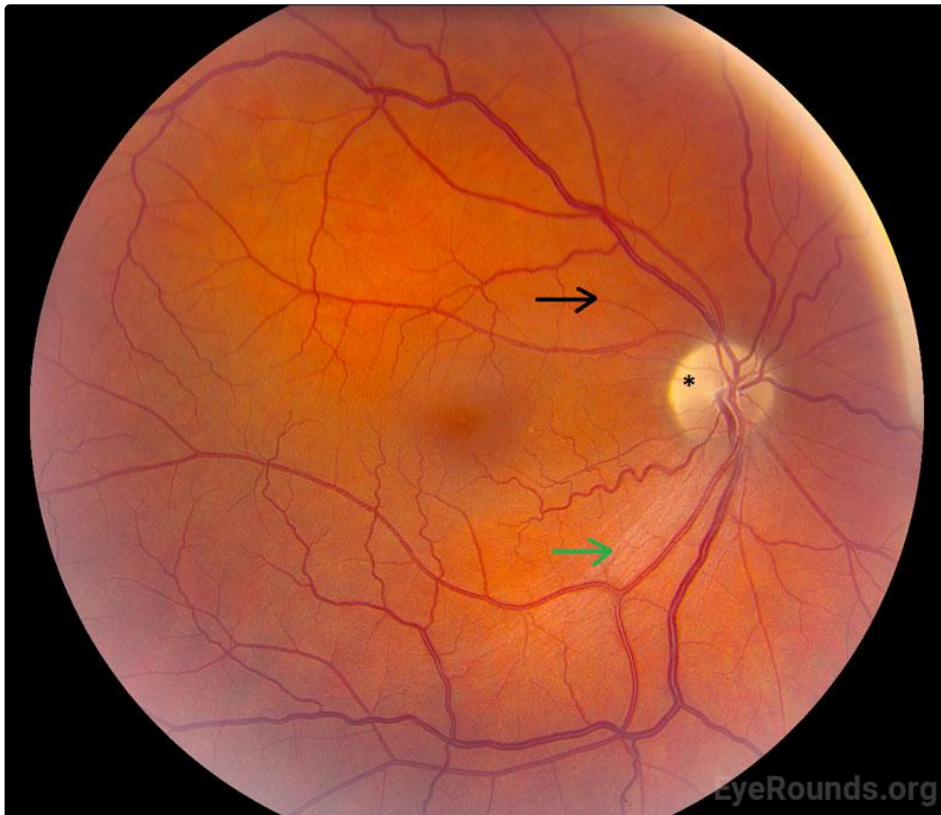


Fig. 5

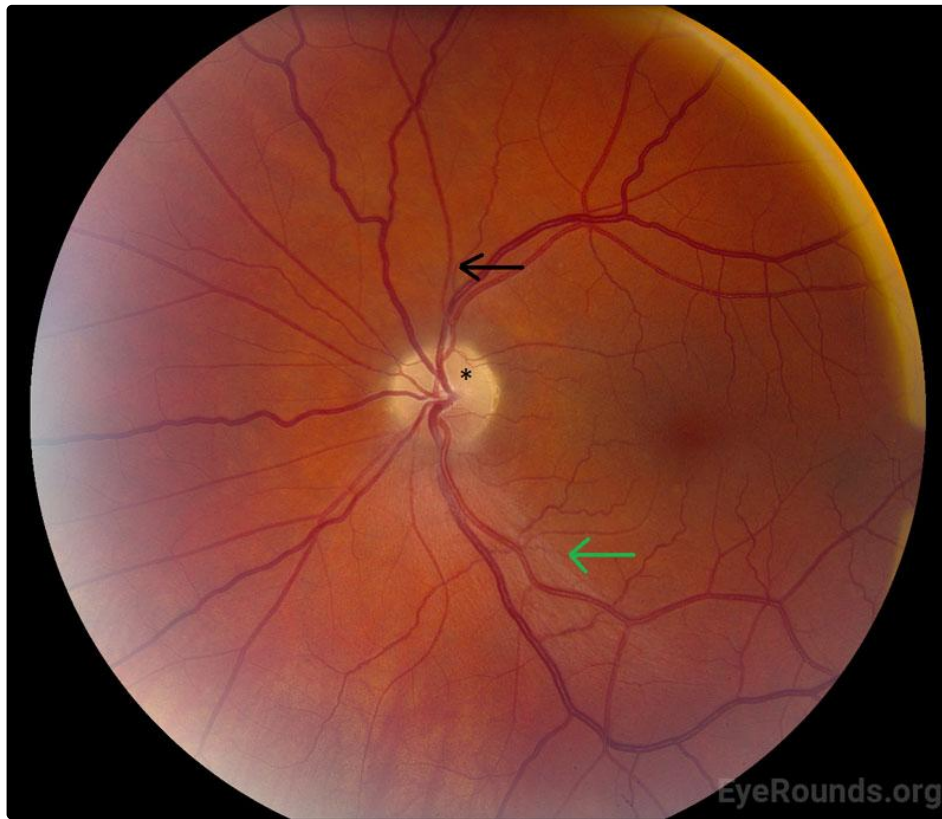
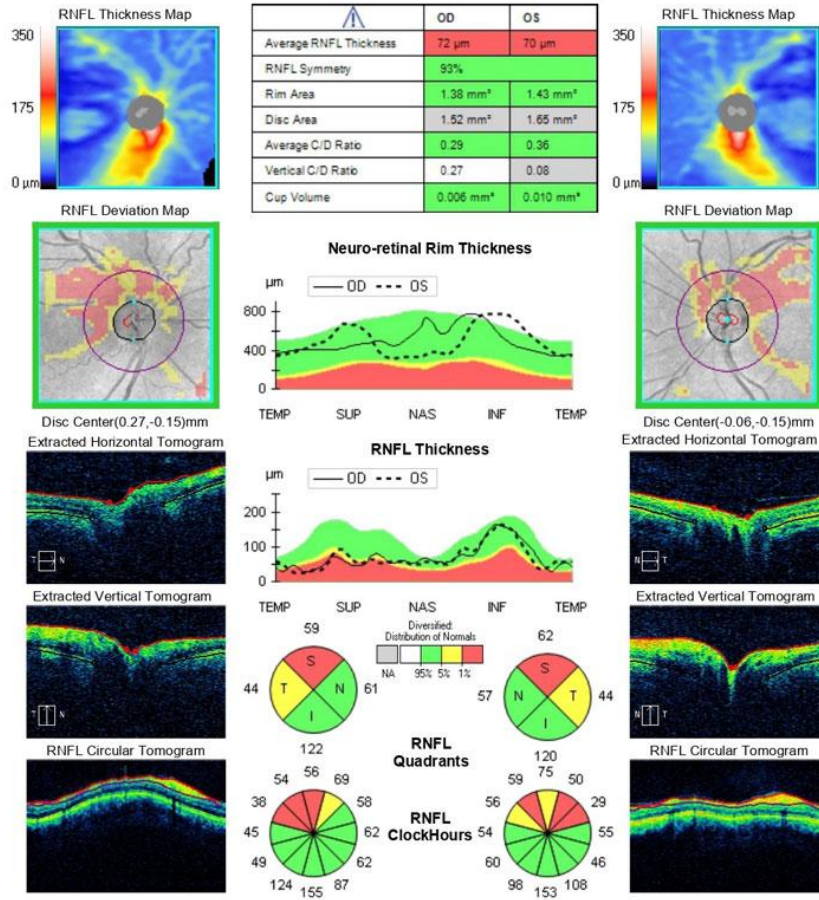


Fig. 6

Seventeen months after first presentation, his visual acuities were 20/15-1 OD and 20/50-2 OS. Fundusoscopic examination showed superior segmental optic disc (asterisk) pallor and loss of the RNFL bundle superiorly (black arrow) versus normal RNFL inferiorly (green arrow) in both eyes. (Fig. 5 and 6)

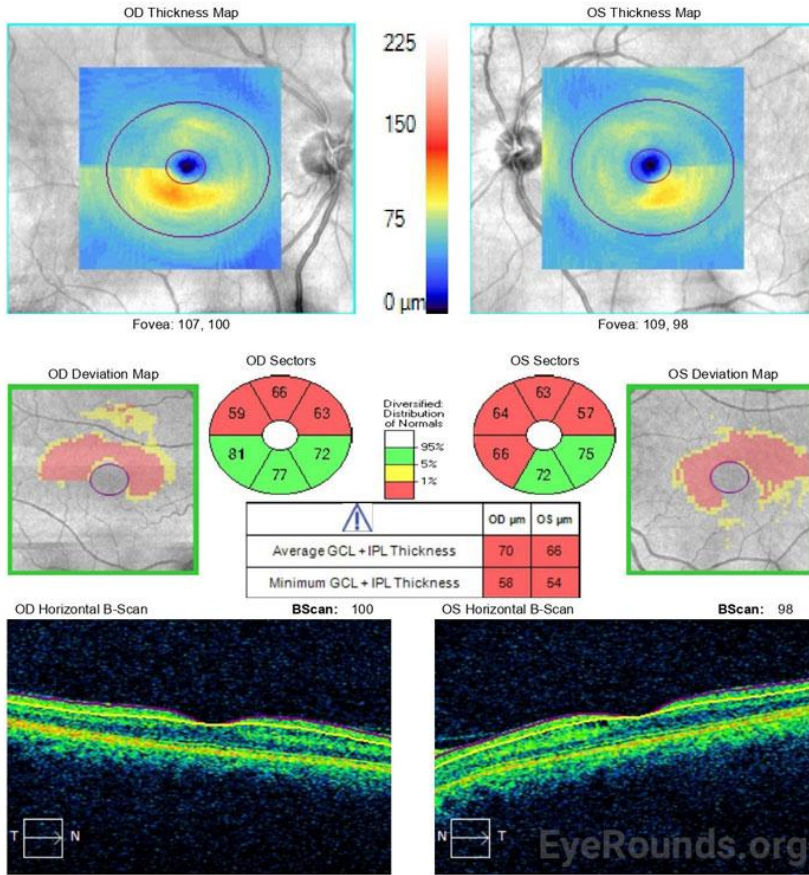
ONH and RNFL OU Analysis: Optic Disc Cube 200x200 OD ● | ● OS



OCT of the optic nerves showed bilateral superior RNFL bundle loss corresponding with the above photo. (Fig. 7)

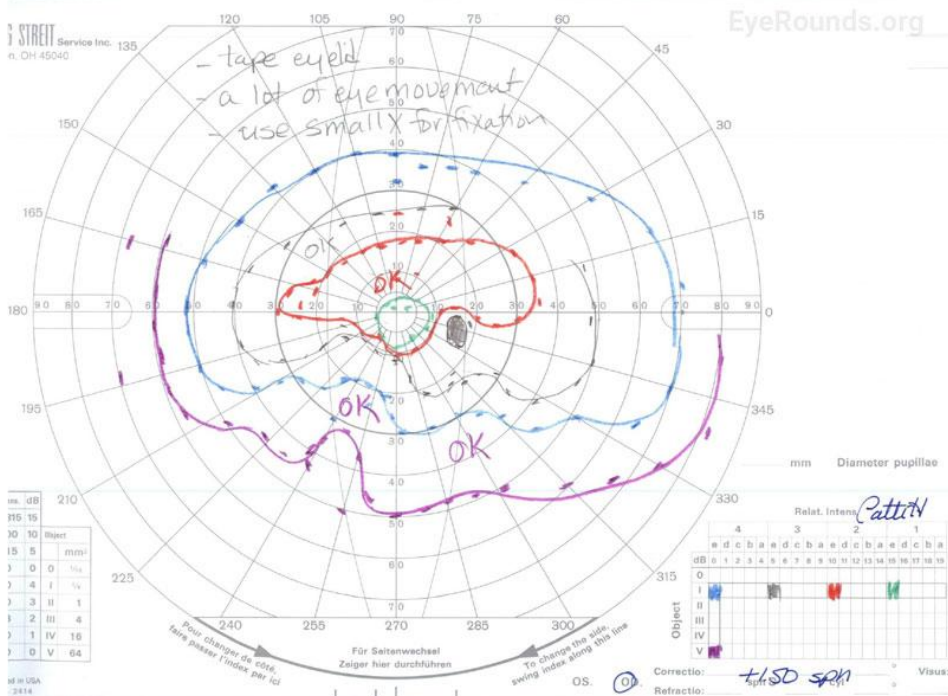
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Ganglion Cell OU Analysis: Macular Cube 200x200 OD ● ● OS



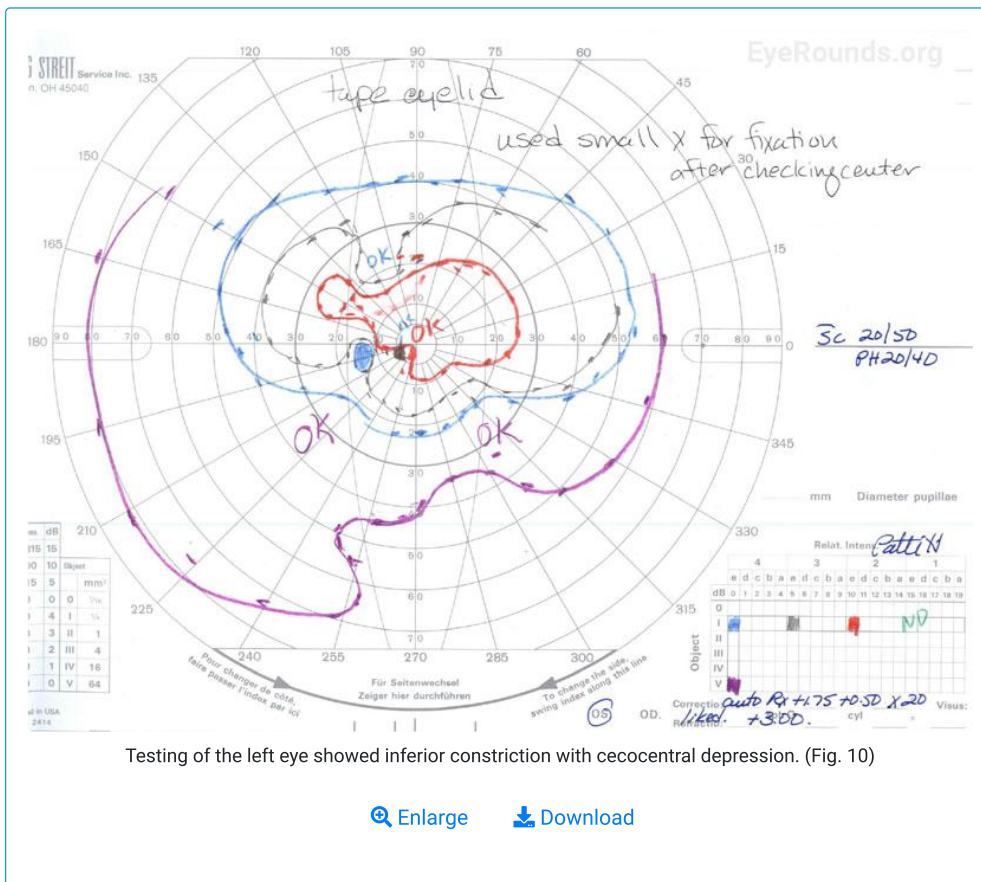
GCL analysis demonstrates superior altitudinal GCL loss. (Fig. 8)

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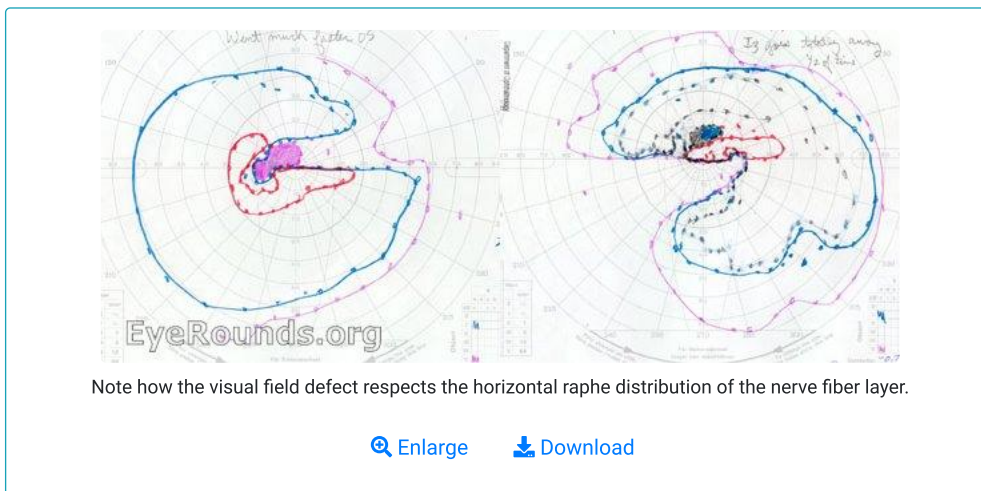
Goldmann visual fields obtained seventeen months after first presentation showed an inferior altitudinal defect in the right eye with generalized depression. (Fig. 9)

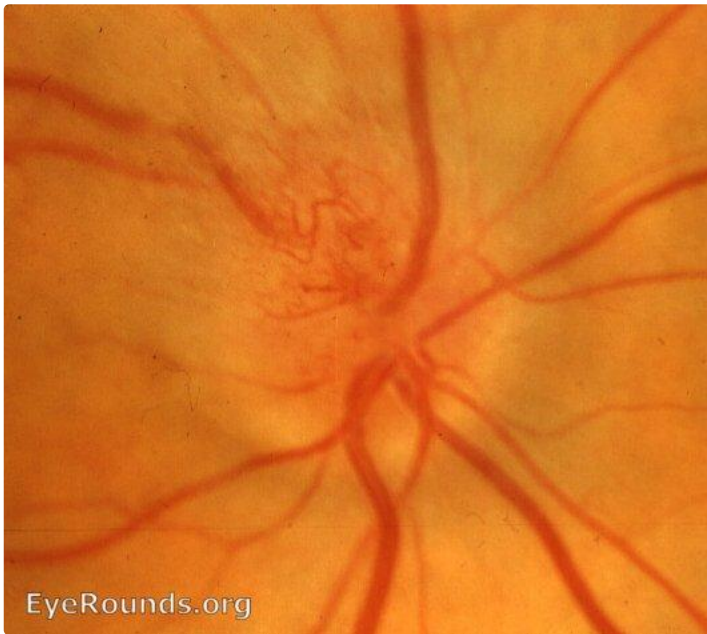
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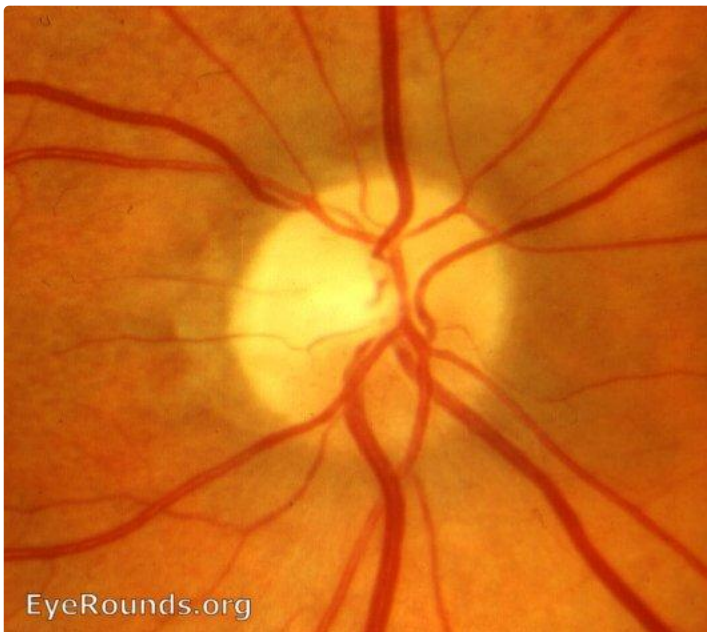
This patient experienced bilateral vision loss on awakening. She had bilateral optic nerve swelling with the visual fields below.





Fundus photographs of right eye of a diabetic patient with non-arteritic AION showing. During early stages optic disc edema involving the superior temporal part of the optic disc and prominent vessels in that region.

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During later stages: pale color (atrophy) in the upper half of the optic disc - more marked in the temporal than the nasal part, and spontaneous resolution of the prominent blood vessels on the optic disc.

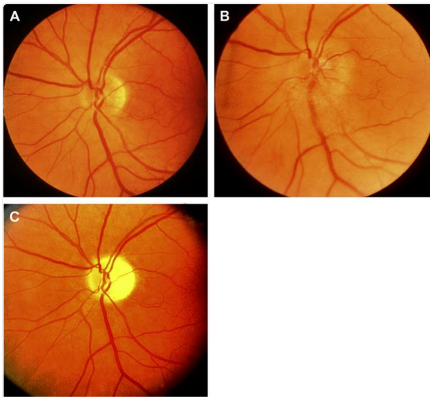
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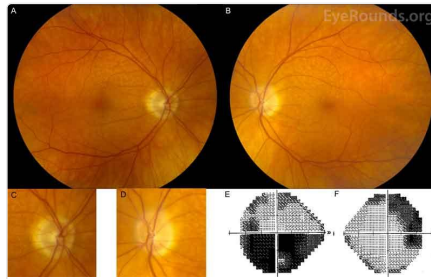


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