

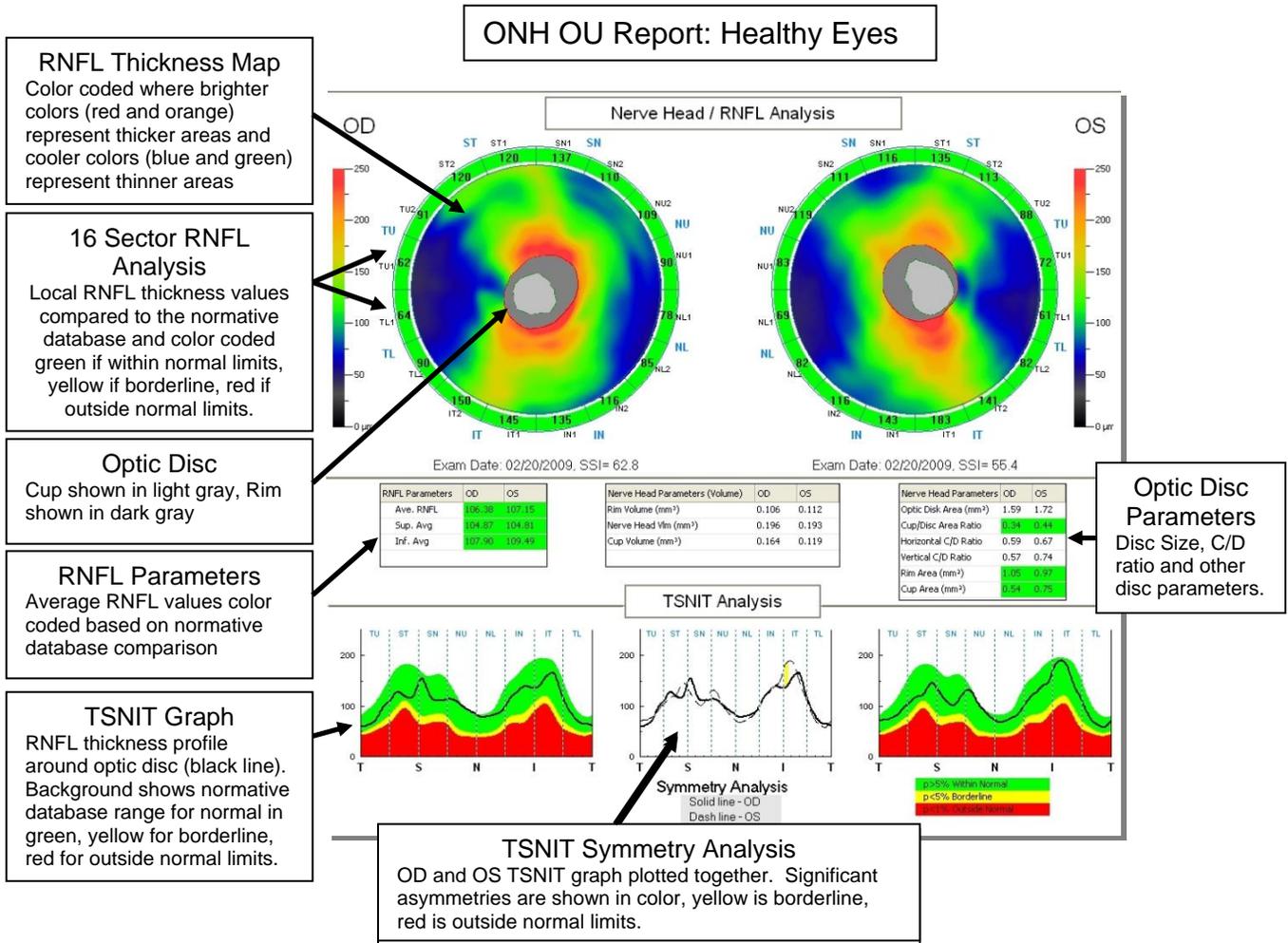


RTVue Interpretation Guide

Diagnosis and Management of Glaucoma

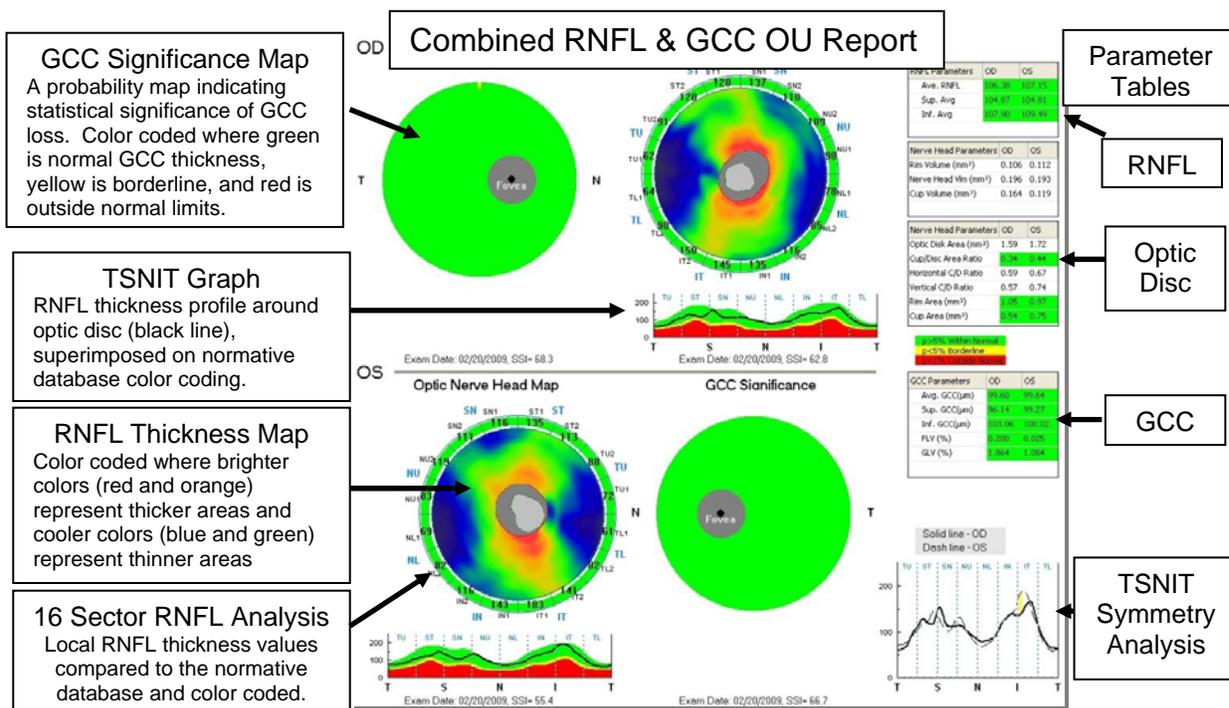
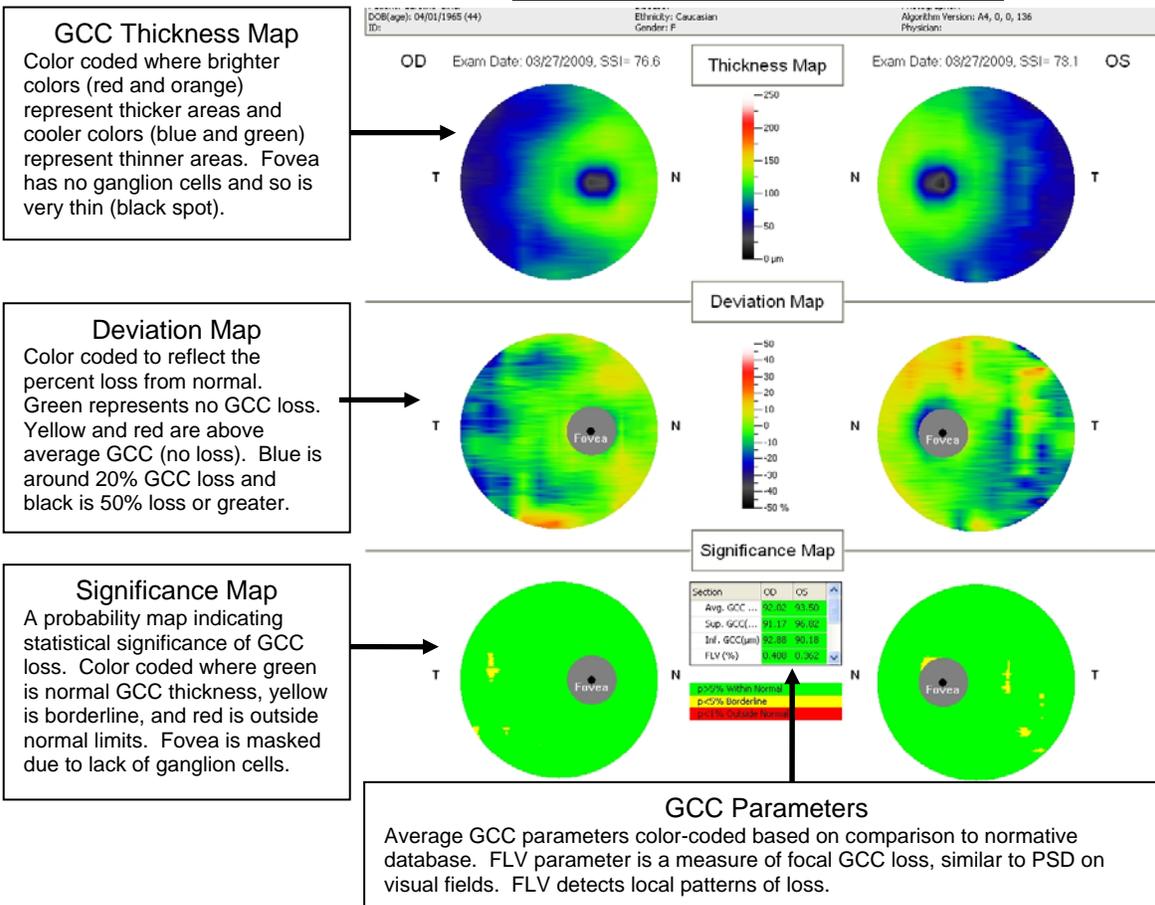
The RTVue offers comprehensive glaucoma evaluation by providing assessment of the RNFL thickness, optic disc morphology, and the ganglion cell complex thickness. All three of these structures are affected in glaucoma.

Below we will show how this analysis is presented in the 3 printed reports, the Optic Nerve Head (ONH) Report, the Ganglion Cell Complex (GCC) Report, and the combined ONH & GCC Report. We will start with a normal healthy eye to cover the various parts of the reports. Then we will show a glaucoma case to illustrate the typical damage as detected with the RTVue.



The color-coding of the 16 RNFL sectors, the parameters, and in the TSNIT graphs is based on a comparison to a large ethnic specific normative database that is adjusted for effects of age and disc size as well as ethnicity. The color-coding is a guide to indicate when a given measure falls outside the normal range of the database based on probability values. Red color indicates a probability value of less than 1%, this means less than 1% of normal eyes have values that low (thin).

GCC OU Report: Healthy Eyes



Glaucoma Case

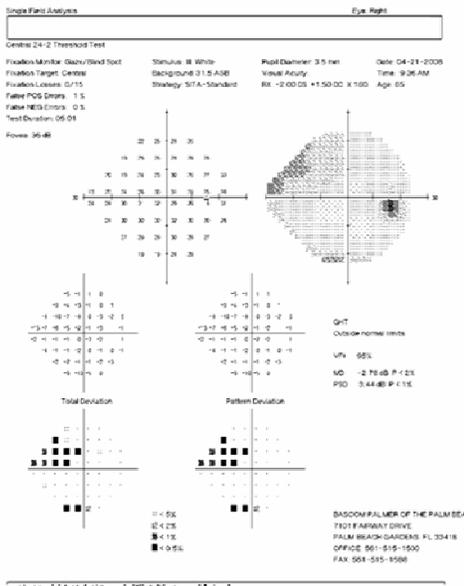
- 66 year-old white female
- Positive family history of glaucoma
- Medical history: hypertension, hypercholesterolemia
- Treatment: Cosopt BID OU and Lumigan qhs OU
- IOP 15 mmHg OU
- CCT 555 OD 554 OS
- VA 20/20 OU



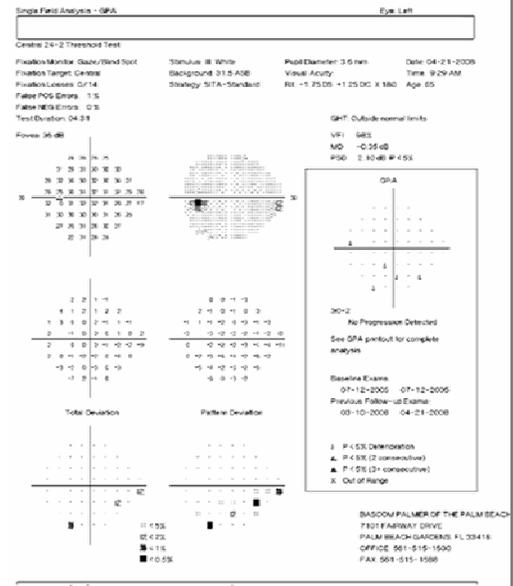
Optic Disc Photo OD
Notice the vertically elongated cup, with inferior Rim notching and PPA.



Optic Disc Photo OS
Some superior Rim thinning and PPA.

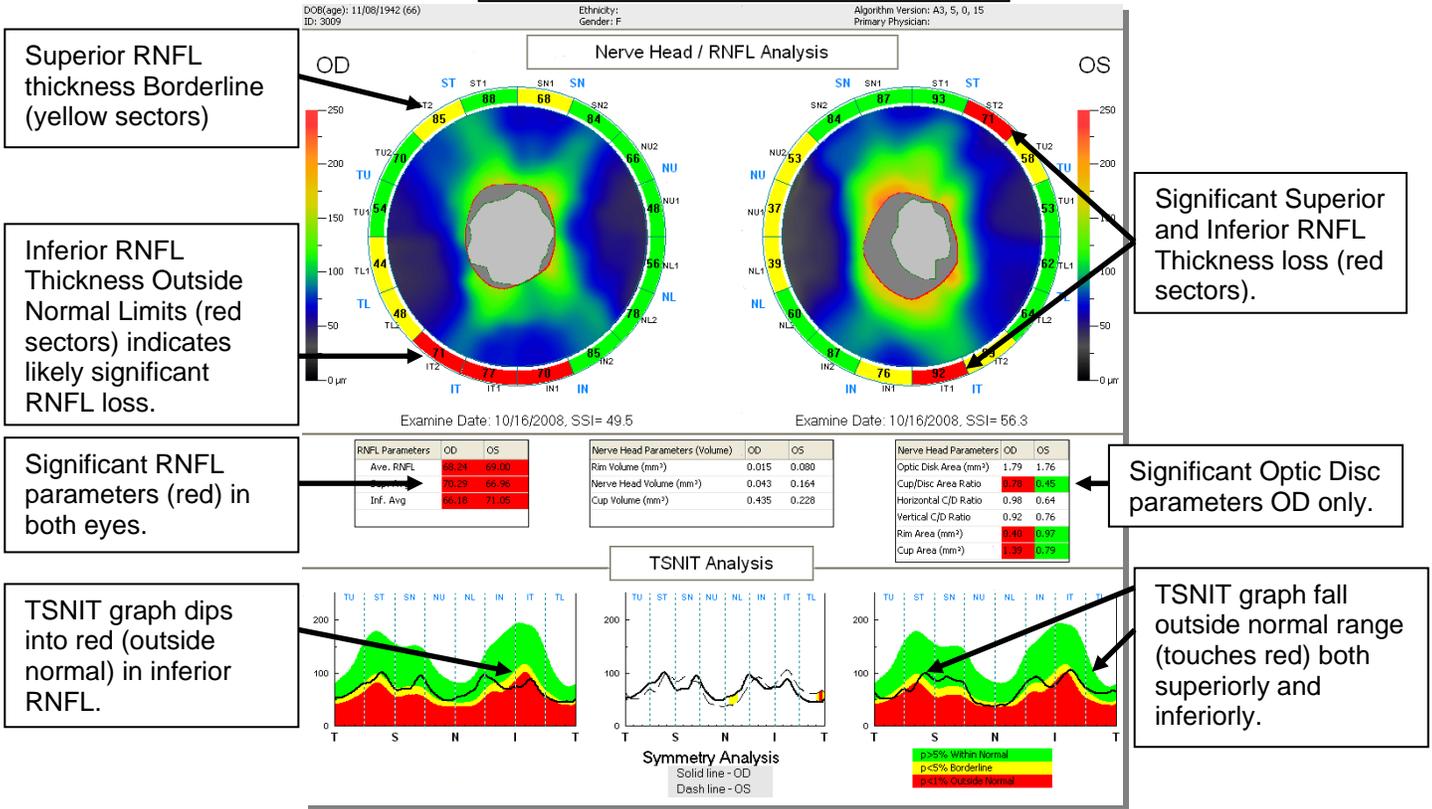


Visual Fields OD
Standard Automated Perimetry (SAP) shows superior visual field loss. GHT is Outside Normal Limits with MD of -2.78 indicating early visual field damage.

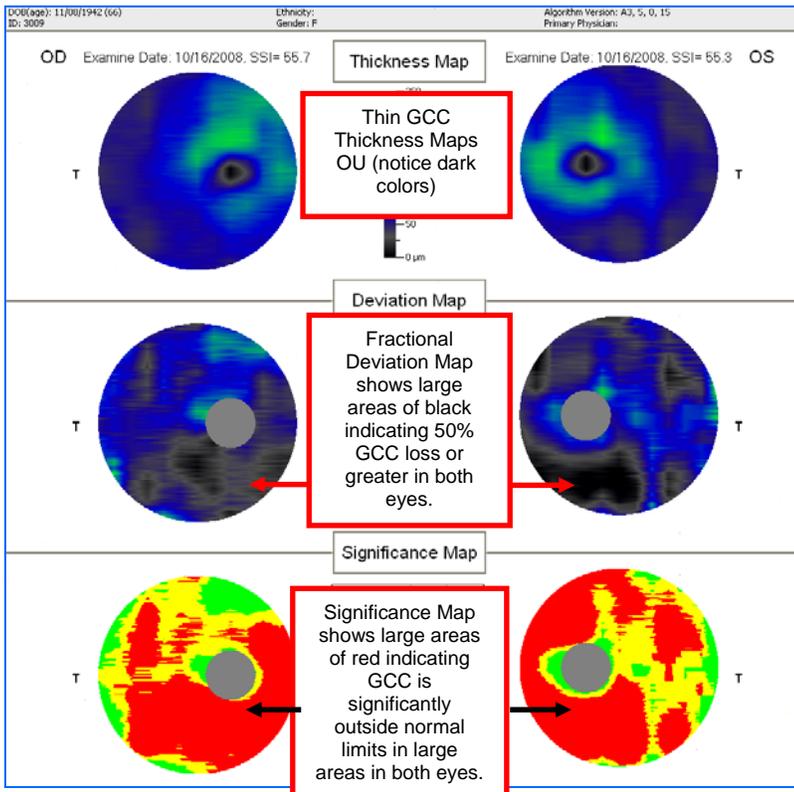


Visual Fields OS
SAP shows mild inferior field loss. GHT is Outside Normal Limits with MD of -0.55 indicating very mild loss. GPA indicates no progression.

ONH OU Report: Early Glaucoma



ONH OU Report: Early Glaucoma



Case Summary

The optic disc photos reveal neural-retinal rim thinning in both eyes, OD worse than OS. Visual fields show early damage superiorly OD, and perhaps some damage inferiorly OS. Field loss in both eyes is mild at best. The RTVue ONH scan shows significant RNFL thinning superiorly and inferiorly OU. The Ganglion Cell Complex shows extensive loss. The RTVue OCT results from the GCC scan and ONH scan suggest the structural damage is worse than the functional loss, possibly indicating this patient will soon lose more vision. In this case, the GCC detected more loss than the RNFL analysis.