

Diagnostic Ability of Optical Coherence Tomography (OCT) in Correlation with Automated Perimetry in Early Glaucoma Diagnosis

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Abstract:

Objective: To compare retinal nerve fiber layer (RNFL) measurements performed with Stratus OCT in normal and glaucomatous eyes to evaluate the sensitivity, specificity, and accuracy of these values in relation to automated field examination.

Methods: 69 eyes of 39 of glaucoma suspect and early glaucoma patients (15 males and 24 female) early glaucomatous eyes were included in the study.

Diagnostic groups were classified based on intraocular pressure, optic nerve head appearance, and achromatic automatic perimetry using Octopus field analysis .

RNFL parameters were obtained using a Stratus OCT . RNFL measurements were compared among the groups.

Results: RNFL average thickness, superior, inferior and nasal quadrant thickness showed significant differences in both groups in correlation with field changes.

Conclusion: RNFL measurements performed using Stratus OCT showed differences between the study groups.

OCT may be useful in distinguishing early glaucoma patients from normal with good sensitivity and specificity.

Key words Glaucoma - OCT – Automated Perimetry - RNFL