

R1 R2 R3 PG0 PG1 Estagiário Tecnólogo
PIBIC Last Name - Sakai First Name - Vivian Middle - Naomi

Service (sector) Glaucoma N° CEP

Agreement Between Scanning Laser Polarimetry and Optical Coherence Tomography on Measuring the Retinal Nerve Fiber Layer Thickness in Glaucomatous Patients

V.N. Sakai, T.T. Takata, L.A.S. Melo, Jr., I.M. Tavares, J.A. Prata, Jr.

Purpose: To compare the retinal nerve fiber layer (RNFL) thickness obtained by scanning laser polarimetry (GDx-VCC) and optical coherence tomography (*Stratus* OCT) in glaucomatous patients.

Methods: Twenty-nine eyes of eighteen patients were included. The patients had glaucoma, best-corrected visual acuity of 20/60 or better, no significant media opacity or other ocular disease. Peripapillary RNFL thickness was obtained by both GDx and OCT using circles with radius of 1.4 mm, 1.8 mm and 2.2 mm centered on the optic disc. The average RNFL thickness of each circle obtained by both devices was compared.

results: The concordance correlation coefficients between OCT and GDx measurements at 1.4-mm, 1.8-mm and 2.2-mm radius circles were 0.07 ($P=0.03$), 0.06 ($P=0.13$) and 0.11 ($P=0.09$), respectively. The mean differences between OCT and GDx measurements at 1.4-mm, 1.8-mm and 2.2-mm radius circles were 42.41 μm (SD, 10.79 μm ; $P<0.001$), 30.76 μm (SD, 10.16 μm ; $P<0.001$) and 24.30 μm (SD, 24.30 μm ; $P<0.001$), respectively.

Conclusions: There is a poor agreement between the OCT and GDx RNFL thickness measurements in glaucomatous patients. The RNFL thickness obtained using *Stratus* OCT is thicker than GDx-VCC measurements.