( ) R1 ( ) R2 ( ) R3 ( ) PG0 ( ) PG1 (X) Estagiário ( ) Tecnólogo ( ) PIBIC Last Name - Pires First Name - Luciana Middle - Afonso

Evaluation of the Lack of Refractive Correction on the Reproducibility of the Doubling Frequency Perimetry Exam

Luciana Afonso Pires,Suzana Akemi Tanimoto, Jae Sun Ahn, Augusto Paranhos Júnior Summary: Purpose: To evaluate the influence of lack of the refractive correction on the reprodutibility of the double frequency perimetry examination. Materials and Methods: 40 eyes of 20 patients with a normal ocular examination, ametropias corrected with spherical equivalent (> -5.00DE and < -0.25DE / > +0.75 and < +2.50DE); intraocular pressure less than 21mmHg and optic nerve with cup/disc ratio less than 0.6 underwent the double frequency perimetry exam with the "screening" program first and then were given the "C20 full threshold" with and without correction, within a randomized order .The evaluation of the difference between MD and PSD with and without correction was carried out with the paired t-test. The evaluation of the dependency between the eyes, regarding refraction, MD and PSD measures was performed with the Pearson correlation test. All calculations were done with the mean values of the two eyes. The difference between MD with and without correction was used as a dependent variable in a simple linear regression and the spherical equivalent as a independent variable. Results: Six patients (30%) had the first examination performed with correction and 14 patients (70%) without correction. A strong dependency between right and left eyes was found for the spherical equivalent (r = 0,961; P< 0.0001); MD with correction (r = 0,865; P<0.0001) and MD without correction (r = 868; P<0.001).No difference was found in mean values of MD with and without correction (p=0.203), and in mean values of PSD (P=0.887). The variation of MD values was not influenced by the variation of the mean spherical equivalent (r2 = 2,7%; p = 0.487). Conclusion: No influence was verified in the double frequency perimetry test for the range of the spherical equivalent tested. Extreme values must be tested to verify this influence.