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REPRODUCIBILITY OF LASER DOPPLER FLOWMETER FOR ONH BLOOD FLOW MEASUREMENT

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Purpose: To evaluate the reproducibility of measurements in the parameters of Velocity (Vel), Volume (Vol) and Flow (Fl) of the optic nerve head blood flow using the laser Doppler flowmeter (Occulix 5000).

Methods: Seven eyes of seven normal volunteers (4 male 3 female, age range 25-31 years) underwent laser Doppler flowmetry. Three points at the temporal rim of the optic nerve head free from any visible blood vessels were identified. The parameters of velocity, volume and flow were measured with the laser Doppler flowmeter (Occulix 5000). A minimum of twenty seconds measurements were obtained in four sessions separated by one week period. The subject's IOP, BP and pulse rate was also measured in each visit.

Results: The coefficient of variation (CV%) for the parameter of flow of the optic disk was 5.8 (range 3.4 - 8.8) and there was no statistically significant difference in the perfusion pressure between visits.

Conclusion: Laser Doppler flowmetry provides highly reproducible measurements of optic nerve head blood flow. It can be a valuable tool in the evaluation of ONHBF relating to glaucoma.

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ACANTAMOEBIA KERATITIS-a case report

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Acanthamoeba keratitis still is a problem in ophthalmology because of diagnostic and therapeutic difficulties. To date, Acanthamoeba keratitis is an increasing pathology because of the more widespread use of the contact lenses.

The patient was 22 year old myopic student, soft lens wearer. He complained of progressive pain and redness in his left eye since a week. The patient was unsuccessfully treated with topical antibiotics and steroids, including antiviral and antihistaminics. After three months, he complained redness and photophobia with corneal ulcer and Acanthamoeba keratitis was suspected.

Methods: the essential parasitological diagnosis was confirmed after corneal scraping inoculation onto agar with lawn of Escherichia coli and morphological identification and according to the Pussard and Pons classification were done. A therapy with 0,02 PHMB for three months with prolonged decreasing dosage was begun with resolution of the infection.

Conclusion: success factor for diagnosis and therapy are early identification of the parasite and the use of intensive therapy with 0,02% PHMB for considerable period of time.