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PERFUSION CHANGES IN OPTIC DISC IN GLAUCOMA PATIENTS – AN OPTIC COHERENCE TOMOGRAPHY-ANGIOGRAPHY STUDY

Oral

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Purpose:

The aim of our study is to compare the perfusion of optic disc head of patients with glaucoma and another control group of young, healthy individuals.

Methods:

Our study includes 30 patients, divided into two groups: 15 patients with glaucoma (subdivided additionally according to the stage of glaucomatous process) and 15 healthy individuals, under the age of 35 years with no ophthalmic and systemic pathologies. They went full ophthalmic examination, tonometry, gonioscopy and OCT-angiography. We compared each glaucomatous patient with a healthy person with the same excavation of the optic disc.

Results:

Our study found significant difference in the vessel density of the optic disc of patients with glaucoma and healthy individuals.
Patients with glaucoma in the initial stage have the same vessel density of the optic disc, as the healthy individuals. Patients with advanced glaucoma have 19% less perfusion, compared to healthy controls.

Conclusions:

OCT-A is helpful and objective, non-invasive tool in assessment of the progression of glaucomatous process. It has enormous advantage in assessment of the disease in patients with additional retinal pathology (age-related macular degeneration, myopic degeneration, diabetic retinopathy)