

POST TRAUMATIC LENS NEOVASCULARIZATION MANAGED BY ULTRASOUND BIOMICROSCOPY

Marina Papanaga^{1,2}, Angela Corduneanu^{1,2}, Mario De La Torre³, Andrei Chiaburu⁴, Eugeniu Bendelic^{1,2}

¹ Ophthalmology Department, "Nicolae Testemițanu" State University of Medicine and Pharmacy, Chișinău, The Republic of Moldova

² Ophthalmology Department, "Timofei Moșneaga" Republican Clinical Hospital, Chișinău, The Republic of Moldova

³ Ophthalmology Department, The National University of San Marcos, Lima, Peru

⁴ Ophthalmology Department, "Emilian Coțaga" Clinic, Mother and Child Institute, Chișinău, The Republic of Moldova.

Introduction: Ocular trauma is a serious public health problem that affects a person's quality of life through vision impairment or even blindness. It is also worldwide ophthalmic emergencies with multiple reported complications, primarily of the anterior segment such as hyphema, iridodialysis, cyclodialysis, angle recession, cataract, lens dislocation, glaucoma, intraocular foreign body but lens neovascularization has rarely been reported.

Aim of the study: To report a clinical case of neovascularization within the lens of a child, which is a typically an avascular structure, following ocular trauma managed by ultrasound biomicroscopy.

Methods and Materials. We present the case of an 8-year-old boy who developed neovascularization in an opacified lens 2 months after surgery for penetrating ocular trauma. The patient's complains were: gradual vision loss in left eye. The visual acuity in this eye at the time of addressing was certain light perception compared to the postoperative of 20/50. The patient also developed intraocular hypotension 2 months after penetrating eye trauma. The slit-lamp highlighted small and uneven anterior chamber, cataract and a well-defined subcapsular neovascularization. Ultrasound biomicroscopy examination revealed small anterior chamber, narrowed anterior chamber angle, positive lens vault, opacified lens subluxation, a linear echogenic membrane from the pars plana to the posterior capsule of the lens with ciliochoroidal effusion. Following the investigation, the patient was administered peribulbar triamcinolone injection and Anti-VEGF intravitreal injection.

Results. After the intraocular injection with Anti-VEGF, the vessels at the level of the posterior capsule membrane decreased in number more than half. The visual acuity remained the same, certain light perception and the intraocular hypotension in the left eye is maintained which delays the cataract extraction operation. The patient is undergoing follow-up care.

Conclusions. 1. Lens neovascularization is a rare phenomenon which occurs due to traumatic phacolysis, chronic uveitis or severe ocular ischemia. 2. Ultrasound biomicroscopy highlighted the ciliochoroidal effusion that was not clearly visible on the posterior pole ultrasonography, as well as the subluxation of the opacified lens with a positive vault lens, which helped to guide the treatment.