GLAUCOMA

VISCOSINUSOTRABECULOTOMY IN PRIMARY CONGENITAL GLAUCOMA

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Primary congenital glaucoma (PCG) is rare inherited eye disorder, which incidence of approximately 1 in 10000 births in Europe and USA.
Most cases of PCG occur sporadically. Pathogenesis – morphologic anomalies of the trabecular meshwork & Schlemm's canal, also common anterior iris insertion & agglomeration of microfibrillar material.
The main feature are ocular enlargement, corneal edema & optic nerve cupping. Examination under anesthesia includes measurement of corneal clarity & diameter, intraocular pressure, slit lamp examination, gonioscopy, ophthalmoscopy, ultrasonography.
Initial surgical treatment of PCG are – goniotomy, trabeculotomy ab externo, primary trabeculotomy, ab externo combined trabeculotomy & trabeculectomy. Postoperative inflammation, scarring & active regeneration makes instability of surgery results.
Hyaluronic acid (HA) is the integral part of the majority of viscoelastics, disclosed the anti-inflammatory properties.
The developed original method of glaucoma surgical treatment – viscosinusotrabeculotomy allows to preserve the formed outflow pathways of the intraocular fluid due to its temporary intubation by "liquid" implant (dispersive viscoelastic) & reduce the intensity of the inflammatory reaction of injured tissues under the influence of HA in its composition.
The usage of the viscosinusotrabeculotomy in PCG (45 children – 75 eyes) was effective in 98,7% of cases in early post op, in 91,2 % in 2 years & in 88,9 % in 3 years follow up period.