



7. TREATMENT AND REHABILITATION OF CHILDREN WITH CONGENITAL, UVEAL AND TRAUMATIC CATARACTS

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Introduction. Cataract among children is one of the major causes of preventable childhood blindness, affecting approximately 200,000 children worldwide, with an estimated prevalence ranging from 3 to 6 per 10,000 new-borns. Early diagnosis and treatment are crucial to prevent the development of irreversible amblyopia and strabismus.

Aim of study. Appreciation of treatment methods and rehabilitation of children with congenital, uveal and traumatic cataracts.

Methods and materials. Clinical research was based on the evaluation of 35 medical records. The aspects investigated were: children's gender, age, living environment, diagnosis, associated pathologies, heredo-collateral antecedents, morphological type of cataract, associated ocular diseases, visual acuity, treatment, complications, postoperative rehabilitation (binocular vision).

Results. Thirty-five children participated in the study, of which 29 children were diagnosed with congenital cataract, 4 with uveal cataract and 2 children with post-traumatic cataract. Most of them were males with a 2:1 ratio. The majority of study subjects were infants ($n = 12$) and children aged 2 to 12 years ($n = 23$). Posterior polar cataract reported 51.4% was the most common morphological form. Nystagmus in 28.5%, convergent strabismus in 14.2% and divergent strabismus in 5.7%, amblyopia in 14.2%, microcornea in 5.7% and microphthalmia in 6.60% were found as associated eye features. The method of choice in the treatment of congenital cataract has been surgery. In 80% cases, ECE (extracapsular cataract extraction) was performed by phacoaspiration with IOL (intraocular lens) implant. The IOL models used for surgery were: Acrysof IQ - SN60WF; Acrysof Multipiece - MA60BM; Acrysof IQ Toric - SN60T3; Acrysof IQ Panoptix - TFNT00; Bi-Flex POB-MA - 877PAY. Among post-traumatic children, anterior chamber placement and removal of lens masses was performed. Intraoperative complications were detected among 20% of children and postoperative complications at 57.14% of children, including: corneal edema 17.14%, macular edema 2.85%, iritis 2.85%, exudative reaction in anterior chamber 5.71%, secondary incipient peripheral cataract 54.28%, posterior capsule fibrosis 11.42%, corneal dystrophy 5.71%. The most common intraoperative complication was vitreous body herniation in the anterior chamber. Secondary incipient peripheral cataract was the most popular postoperative complication, solved by laser capsulotomy. The use of video computerized self-training in postoperative period contributed to the restoration of binocular vision and correction of obscurative amblyopia.

Conclusion. As demonstrated in our study, CMV infection is the most common cause of congenital pediatric cataract. Other causes being herpes simplex virus infection, congenital TB or Down's syndrome associated. Recent advances in surgical techniques, more predictable IOL power calculation, IOLs composition and design, early postoperative use of contact lenses for optical rehabilitation have contributed to improved outcomes after pediatric cataract surgery.