

# Cataract

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## Key Points

- What is cataract
- Incidence of cataract
- Pathological basis of cataract
- Prognosis of cataract

Cataract is one of the familiar illnesses of the eye. At present, Phacoemulsification in addition to traditional intraocular lens (IOL) implantation can attain adequate rejuvenation effects. Yet, the rectification of corneal astigmatism is finite, while Toric IOL implantation can acquire fine astigmatism correction cure. We recovered randomized controlled trials on the therapy of cataracts published in the MEDLINE, EBSCO, Cochrane Library, EMBASE, PubMed, Science Direct, Wanfang China National Knowledge Infrastructure and Weipu databases. Professional journals were explored by freehand to avoid deletions.<sup>1</sup>

Scarcely unwanted glaucoma operations are cure as surgeries substitute for the glaucoma focused on decreasing the intraocular pressure with well safety form in comparison to conventional trabeculectomy. Although less invasive methods are present, complications can occur in any surgical treatment. This is the very first case study of anterior uveitis following mutual therapy with the disease surgery and iStent inject which brings under discussion the management of postoperative inflammation, to the best of our knowledge.<sup>2</sup>

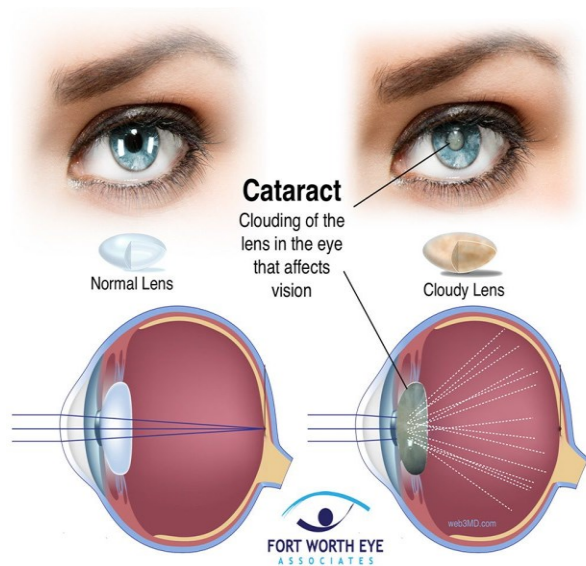
Children less than eighteen years of age with retinoblastoma who experienced operation for secondary cataract between 2000 and 2020 were assessed. Web of Science, Medline (OVID), Cochrane and Embase were examined from beginning to August of 2020. Fifteen children's eyes were counted in. Average age of diagnosis of retinoblastoma was twelve months. Cataract occurred

at the age of thirty-nine months. Average preoperative quiescent interval was forty-four months.<sup>3</sup>

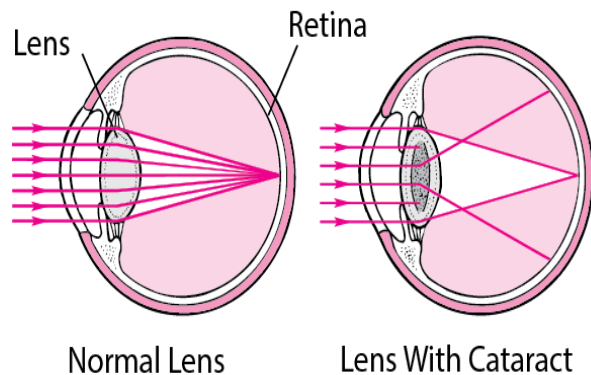
In 2015, Gao et al proposed a method for grading cataracts by using the grouping of recurrent neural network (RNN), convolutional neural network (CNN), and support vector regression by the use of slit-lamp images. While Li et al proposed to recognize and annotate cataracts as well as the other anterior segment pathologies with proprietary models by the use of slit-lamp images. Presentation of Visionome was closer to ophthalmologists by achieving superior performance in comparison to an ophthalmologist with a year of clinical experience (accuracy 79.47–99.22%).<sup>4</sup>

Surgery of cataract is often made in use in the clinical treatment. In this process, the turbid lens nucleus is broken into the chyle by the insertion of an ultrasonic probe inside the little incision in the affected eye's sclera or cornea. The chyle is then pulled out by the suction-perfusion system, the lens cortex is pulled out, and viscoelastic agent is forced in. At the end, the intraocular lens is implanted. The benefits are convenient operation, less operation time, and small damage to the eye.<sup>5</sup>

Preoperative Lipiflow treatment which is done before the cataract surgery is an effective intervention and safe for relieving dry eye and MGD that is induced by the surgery. It can be put forward for both, the patients with the preoperative MGD and those without the baseline MGD, in order to avoid the development of dry eye and MGD caused by the ocular surgeries.<sup>6</sup>



**Figure:** Pathogenesis of Cataract



**Figure:** Difference between normal lens and lens with cataract<sup>1</sup>

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