

Verisyse Intraocular Lens Implantation in Children with Anisometropic Amblyopia

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Anisometropia is a difference in refractive power between the two eyes of an individual. It leads to the projection of unequal images on the fovea, which is called aniseikonia, and causes unilateral blur. Severe and untreated anisometropia may lead to amblyopia and the disruption of binocular fusion.

The first nonsurgical method for correcting high ametropia and anisometropia in children is glasses. In most cases, glasses are not appropriate due to the induction of aniseikonia and secondary loss of binocular fusion. The second nonsurgical method, contact lens correction, can obviate these drawbacks but may not be tolerated in many children.

Corneal refractive surgeries are low risk and effective, but many patients are considered unsuitable due to inadequate corneal thickness or severe ametropia.

Iris-claw phakic intraocular lenses are an alternative treatment option for many patients. Initially developed by Fechner and Worst in 1978, the iris-claw lens was modified to a convex-concave configuration in 1991. The Verisyse phakic lens (pIOL) has been available in Europe since 1986 in adults.

In this retrospective study, we investigate the post-operative outcomes and side effects of Verisyse phakic intraocular lenses in the treatment of severe anisometropia in childhood.