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MANAGEMENT OF SEVERELY VISUALLY IMPAIRING ECTOPIA LENTIS IN PRESCHOOL CHILDREN WITH RETROPUPILLARY IRIS-CLAW INTRAOCULAR LENS IMPLANTATION: A CASE SERIES

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To report visual outcomes and safety of retropupillary iris-claw intraocular lens (IOL) implantation in preschool-aged children affected by ectopia lentis.

This is a case series including 6 eyes of 3 children, who presented with bilateral, severely visually impairing ectopia lentis at the Hospital of Bolzano, Italy. Two patients were siblings and had Marfan syndrome. All eyes underwent phacoaspiration, lens capsule removal, anterior vitrectomy, retropupillary iris-claw intraocular lens (IOL) implantation, and peripheral superior iridectomy. The following data were collected: age at surgery, pre- and postoperative best-corrected visual acuity (BCVA) and corneal endothelial cell count (ECC).

The mean age at first surgery was 5,07 years (range: 4,7-5,3 years). Follow-up duration ranged from 3 months to 12 years. The second eye was operated on 4 to 8 weeks after the first procedure. The mean pre-operative BCVA was 0,90 LogMAR (range: 1,00-0,70 LogMAR), improving to a mean post-operative BCVA of 0,1 LogMAR (range: 0,30-0,00 LogMAR). Particular attention was devoted to ECC, which proved to be stable along the 12 years of follow-up.

Retropupillary iris-claw IOL implantation appears to be an effective and safe surgical option for managing bilateral ectopia lentis in preschool-aged children. Early surgical intervention might play a crucial role in achieving favourable long-term outcomes.

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