Cataract surgery following penetrating keratoplasty in children

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Abstract

Background: Following penetrating keratoplasty, cataract surgery warrants certain modifications to ensure maximum survival of the graft. Purpose: To emphasize the intraoperative challenges and surgical manipulations to be followed. Synopsis: The surgeon makes a superior sclerocorneal tunnel avoiding the graft host junction. Dispersive viscoelastic is used. Continuous curvilinear capsulorhexis is done. Cataractous lens aspirated with a low flow rate. The intraocular lens is placed in the bag. Superior peripheral iridectomy and primary posterior capsulorhexis are done. The wound closed with two interrupted 10-0 nylon sutures. Graft host junction integrity is maintained. Highlights: Ensure 1. Good intraoperative corneal visibility, 2. Avoid graft host junction for main port incision 3. Generous dispersive viscoelastic use/soft shell technique to protect the corneal endothelium, 4. Avoid phaco energy in case of soft cataracts/low phaco energy and flow rates, 5. Phaco probe to be meticulously oriented away from corneal endothelium, 6. Primary posterior capsulorhexis to be done as in any pediatric cataract surgery, 7. Make sure of the graft host junction integrity at the end of the surgery, 8. Restrict to a single port whenever possible.

Video link: https://youtu.be/tu4R5JangYs

Key words: Graft survival, pediatric cataract surgery, penetrating keratoplasty

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