A 6-year-old boy presented with a vascularized central corneal scar that developed as a consequence of a perforating eye injury 4 years earlier. The young boy previously underwent vitrectomy at another institution 4 months prior to his admission at our institution. This case is highlighted in a surgical video available at eyetube.net/?v=hefri.

Preoperative findings included a large vascularized corneal scar with iris capture from the 12- to the 6-o’clock position, anterior synechiae throughout the nasal half of the cornea, a posterior chamber IOL, and formation of capsular opacification. His vision was counting fingers, and intraocular pressure (IOP) was normal.

Surgery, including anterior segment reconstruction, IOL exchange, and full-thickness corneal transplant, was planned to address this seriously compromised eye in this young patient.

TREPHINATION, EXCISION, AND EXPLANTATION

Corneal transplantation was initiated with placement of a Flieringa ring to prevent hypotony (Figure 1). In an attempt to prevent damage to the iris, gentle synechiolysis in areas of iridocorneal touch was attempted with an ophthalmic viscosurgical device (OVD) prior to trephination. This was unfortunately impossible due to strong adherence of iris to the cornea. Therefore, we proceeded with trephination using a vacuum trephine, followed by excision of the recipient button with corneal scissors (Figure 2). Due to the presence of anterior synechiae, significant bleeding occurred during this process, making visibility and subsequent surgical steps more difficult.

Manual excision of synechiae was done once the bleeding
subsided, taking extra care to preserve the normal pupillary opening and most of the iris structure. After the recipient button was removed, extensive capsular opacification was noticeable, especially on the anterior capsule. The opacification was successfully excised with small scissors.

Next, a peripheral iridectomy was created at the 3-o’clock position to decrease posterior pressure from the vitreous. After injecting additional OVD into the anterior chamber, we then explanted the IOL; however, we could then see that a broken haptic remained in the posterior capsule (Figure 3). The haptic was gently removed from the capsule without any damage, and the opacified posterior capsule was excised at the pupillary border. This maneuver was limited to the vis-
IBLE AREA IN AN ATTEMPT TO AVOID EXPULSIVE HEMORRHAGE.
Part of the difficulty of this case was the prolonged surgical time required to complete the reconstruction of the anterior segment. Additionally, this procedure in a previously vitrectomized eye carried a high risk of complications such as expulsive hemorrhage. Despite the previous vitrectomy, remnants of vitreous were present at the vitreous base, so an anterior vitrectomy was performed to remove any remnants from the pupillary opening and the peripheral iridectomy.

LENS IMPLANTATION, PUPIL OPENING, AND CORNEAL GRAFT
Next, an aphakic Verisyse iris-fixated IOL (Ophtec GmbH) was implanted in the anterior chamber (Figure 4). Due to the aphakic and hypotonic condition of the eye, enclavation of this lens was extremely difficult but was finally achieved on the posterior side of the iris. Although the lens was successfully fixated on the iris, the pupillary opening remained disproportionally large compared to the lens optic. Additional 10-0 nylon sutures were placed to reconstruct a normal pupillary opening, thus preventing glare and night vision disturbances.

The anterior chamber was filled with more OVD and a donor corneal button was placed on the eye and secured with four interrupted sutures. Four more interrupted sutures were placed to create better adherence of the recipient and donor tissue, and the corneal graft was finally secured with a continuous suture to obtain watertight wound closure. After OVD removal and inspection for vitreous remnants in the anterior chamber and behind the IOL, an air bubble was placed in the anterior chamber to deepen it in the early postoperative hours.

FINAL OUTCOME
Postoperative recovery was without any complications. The corneal graft remained clear, and IOP was normal throughout 8 months of follow-up. The boy was asked to keep his better eye closed for a few hours during the day to force vision in his operated eye.

The outcome of this complicated case at 8 months postoperative was a clear corneal graft, normal IOP, and visual acuity (Snellen decimal) of 0.2.

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