

Supplementary Online Content

Muni RH, Melo IM, Pecaku A, Mannina A, Batawi H, Bansal A. In-office suprachoroidal viscopexy for rhegmatogenous retinal detachment repair. *JAMA Ophthalmol*. Published online August 24, 2023. doi:10.1001/jamaophthalmol.2023.3785

eFigure 1. Device Created for the Suprachoroidal Injection of Viscoelastic (SCVEXY)

eFigure 2. Postoperative Reattachment of the Fovea

eFigure 3. Postoperative Fundus Autofluorescence Imaging

eFigure 4. Longitudinal Swept-Source Optical Coherence Tomography Scans at the Temporal Macula and at the Suprachoroidal Viscopexy Location

eFigure 5. Ultrawide-Field Fundus Swept-Source Optical Coherence Tomography Scans Through the Suprachoroidal Viscopexy Location and Through the Inferior Residual Subretinal Fluid

This supplementary material has been provided by the authors to give readers additional information about their work.

eFigure 1. Device created for the suprachoroidal injection of viscoelastic (SCVEXY)

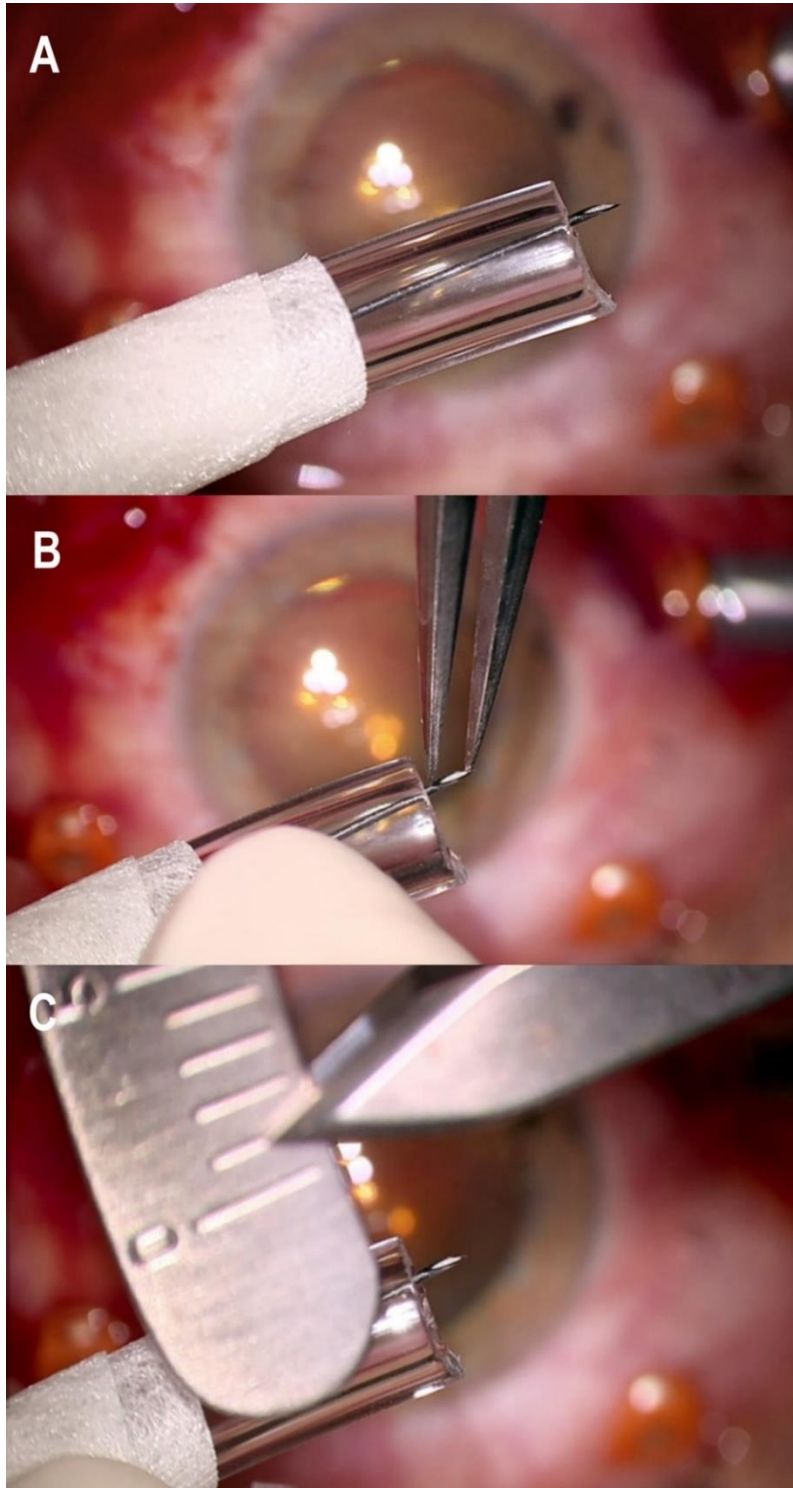
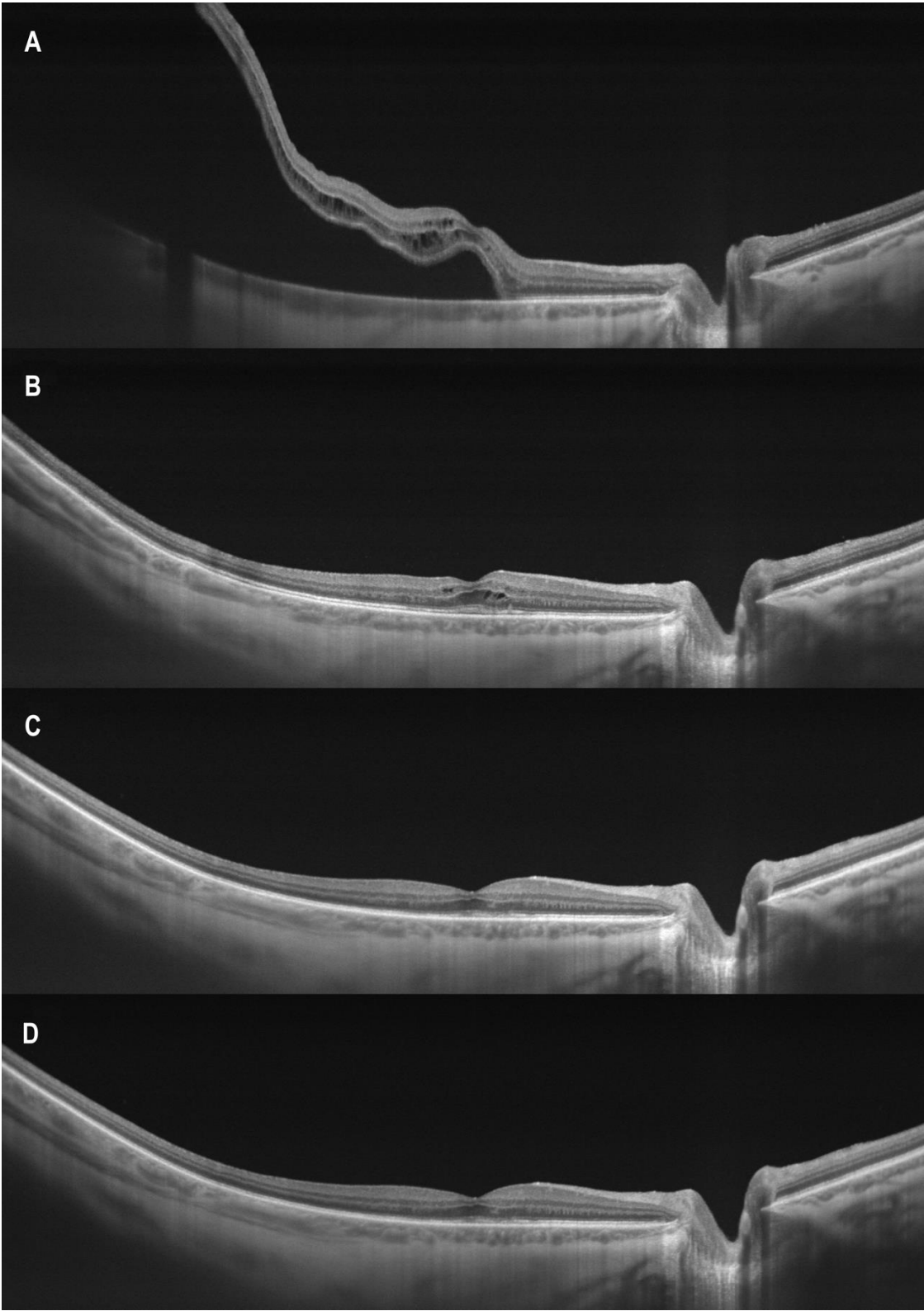


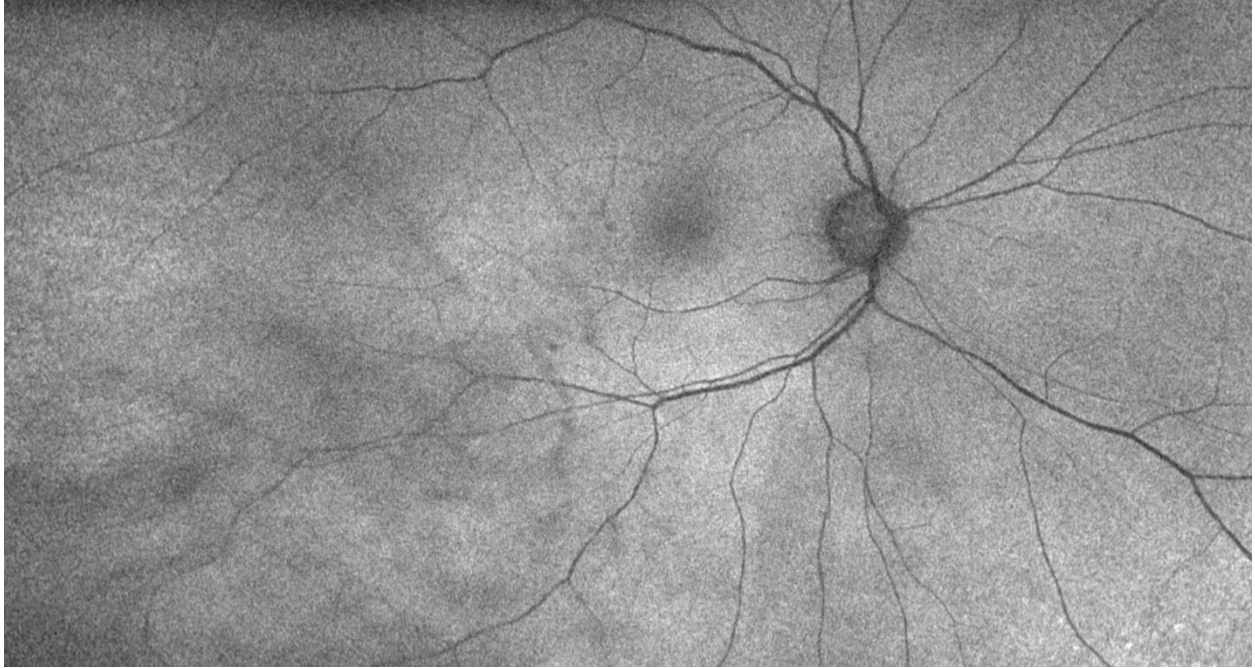
Photo of the device created for the suprachoroidal injection of viscoelastic. A) 30G needle with a custom-made guard that exposed only 1mm of the needle using intravenous tubing and steri-strips. B and C demonstrate that only 1mm of the needle was exposed. The custom guard was made using a rigid intravenous s tubing (CHS Med-RX® Lot 165225) that was measured and cut so that once placed over to the 30G needle, only 1mm of the length of the needle was exposed.

eFigure 2. Postoperative reattachment of the fovea



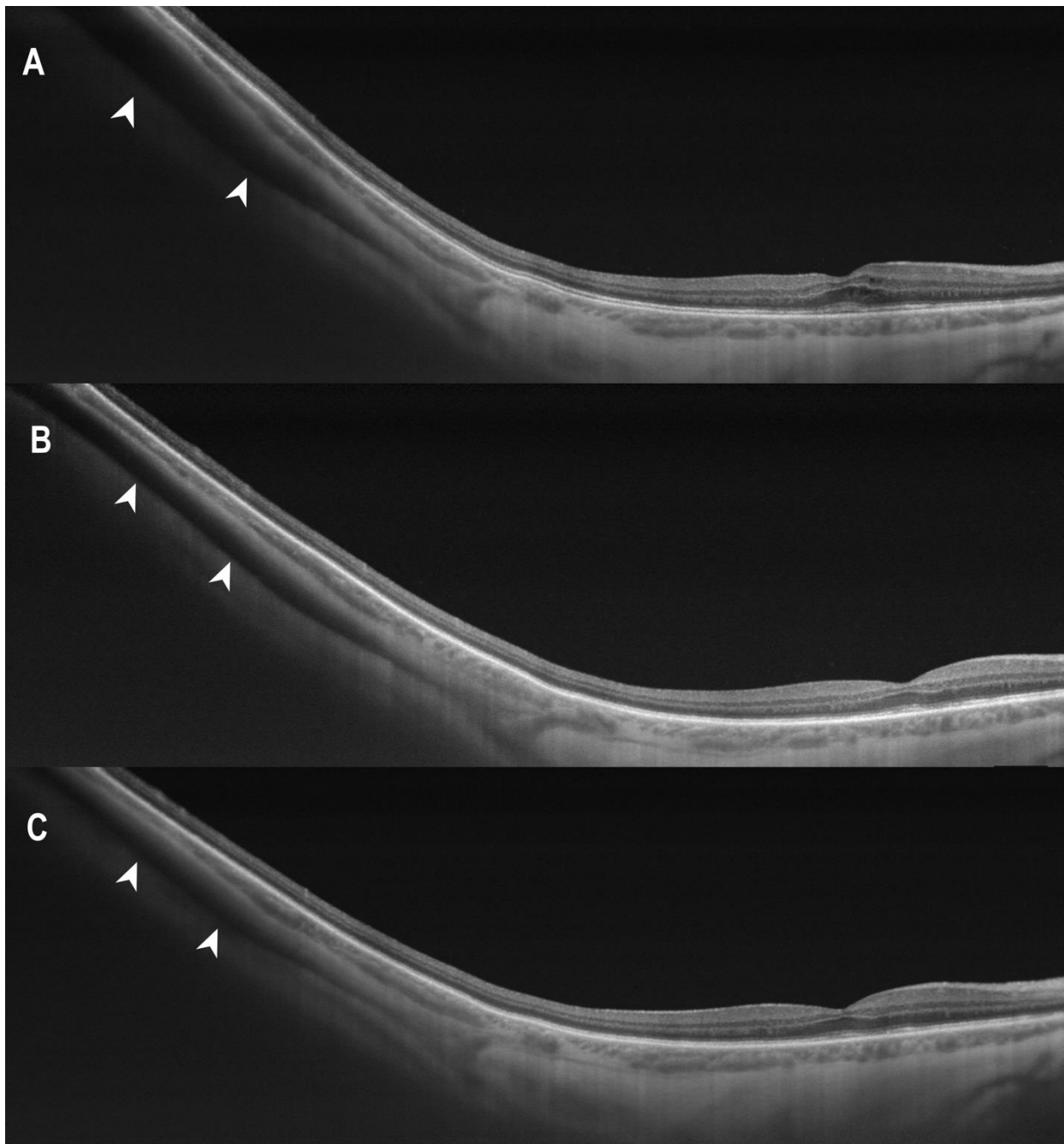
Longitudinal swept-source optical coherence tomography foveal scans demonstrating a progressive reattachment of the fovea over the first week. The patient progressed through the stages of reattachment with no anatomic abnormalities: A) Baseline scan, B) Postoperative day 1 with significant improvement in the outer retinal corrugations and cystoid macular edema (Stage 2), C) Postoperative day 2 demonstrating contact of the retina with the retinal pigment epithelium (Stage 3), D) Postoperative day 3 demonstrating a deturgescence of the bacillary layer (Stage 4), E) Postoperative day 5 demonstrating improved integrity of the outer retinal bands (Stage 5). The patient achieved complete retinal reattachment with rapid recovery of the external limiting membrane and ellipsoid zone integrity.

eFigure 3. Postoperative fundus autofluorescence imaging



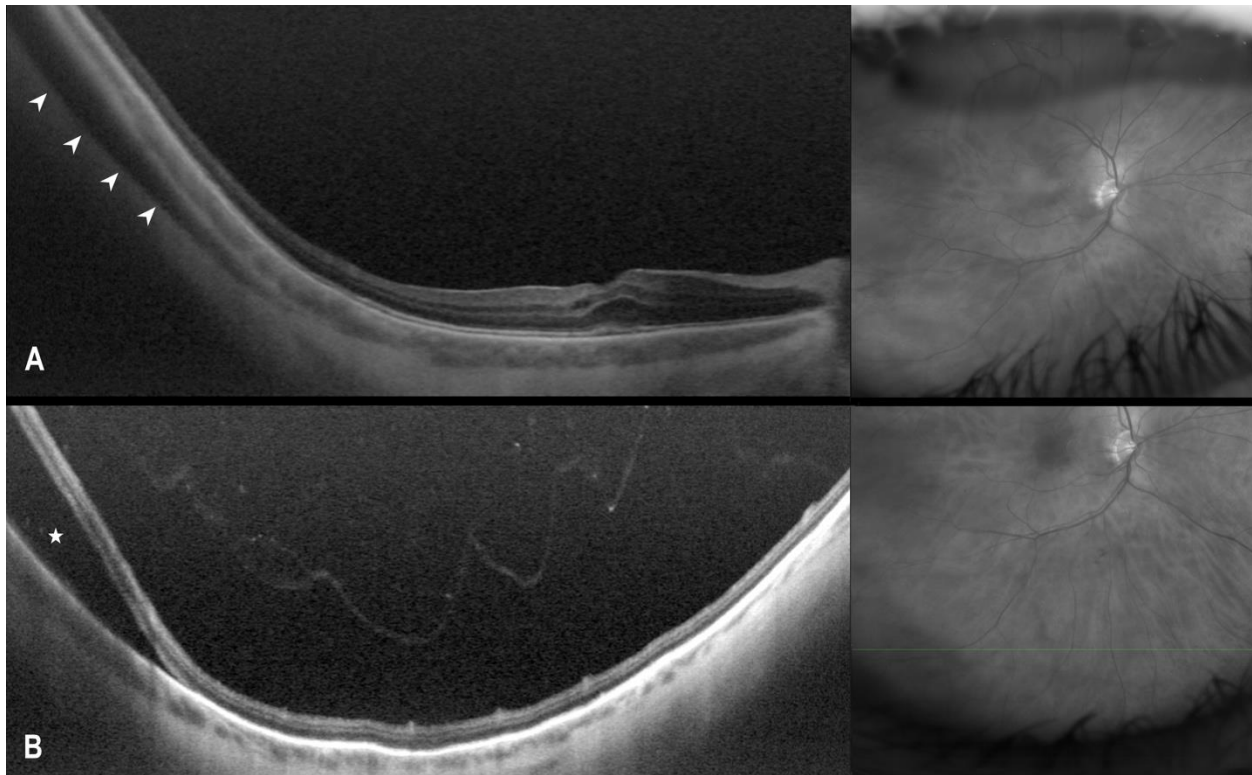
Fundus autofluorescence imaging performed on postoperative day 5 with no signs of retinal displacement on the posterior pole, indicating that the patient achieved a high-integrity retinal reattachment (HIRA).

eFigure 4. Longitudinal swept-source optical coherence tomography scans at the temporal macula and at the suprachoroidal viscopexy location



Longitudinal swept-source optical coherence tomography scans at the temporal macula and temporal mid-periphery demonstrating the location of the suprachoroidal viscopexy (SCVEXY) on the left side of the image. A hyporeflective space between the sclera and the choroid can be observed, indicating the location of the viscoelastic material in the suprachoroidal space over the first postoperative week: A) Postoperative day 1, B) Postoperative day 3, C) Postoperative day 5. A progressive reduction in the height of this hyporeflective gap is observed throughout the post-SCVEXY period (arrowheads).

eFigure 5. Ultrawide-field fundus swept-source optical coherence tomography scans through the suprachoroidal viscopexy location and through the inferior residual subretinal fluid



Ultra-wide-field fundus swept-source optical coherence tomography scans demonstrating complete reattachment of the macular region (A) with hyporeflective space between the choroid and sclera (arrowheads) demonstrating the suprachoroidal viscoelastic material. B) Mild residual inferior subretinal fluid with no outer retinal folds in the extreme inferior periphery (star), representing residual subretinal fluid that slowly resolved over time.