Red reflex photograph demonstrating laceration of the posterior capsule.

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Traumatic Retinal Break From Viscoelastic Cannula During Cataract Surgery

The overall incidence of retinal detachment after extracapsular cataract extraction is between 1% and 2%.1-3 Retinal detachment after cataract surgery usually occurs after a posterior vitreous detachment creates one or more retinal tears in the region of the vitreous base. In rare cases, direct surgical trauma to the posterior segment can cause a retinal break and subsequent retinal detachment. To our knowledge, this is the first report of a retinal tear secondary to direct trauma from a cannula used to inject viscoelastic material.

Report of a Case. A 59-year-old woman was referred to the Retina Service at the Scheie Eye Institute, Philadelphia, Pa, for evaluation after cataract surgery. The patient had undergone extracapsular cataract extraction by phacoemulsification the previous day. After the cataract was extracted, a syringe containing the viscoelastic hyaluronate sodium with an appropriate-sized cannula tip was inserted into the eye. While the viscoelastic was being injected into the capsular bag, the cannula was forcefully ejected from the syringe. The cannula pierced the posterior capsule of the lens centrally (Figure) and drove inferiorly into the posterior segment, where it directly struck the retina. The cannula was removed, an anterior vitrectomy was performed, and a posterior chamber intraocular lens was placed. The clear corneal incision was left unsutured.

On postoperative day 1, the patient noted floaters in the right eye. Her visual acuity was 20/40 and the intraocular pressure was 23 mm Hg. Slitlamp examination was notable for a Seidel-negative clear corneal incision, minimal anterior segment inflammation, and a well-centered posterior chamber intraocular lens. A few pigmented cells were present in the vitreous.

The patient was referred to our service because the posterior segment examination showed a blood clot that emanated through a peripheral retinal break inferonasally and an operculated hole at the 9-o'clock meridian. The posterior pole was normal. The retinal breaks were treated with laser retinopexy.

Six weeks later the patient had a visual acuity of 20/20. The preretinal hemorrhage was almost completely resorbed, and no new retinal breaks or tears were seen. The retinopexy surrounded both retinal tears with moderate pigmentary response; no subretinal fluid was present. The patient retained 20/20 visual acuity and was without complication at 12 months of follow-up.

Comment. Iatrogenic retinal breaks occur rarely during cataract sur-

**Bilateral Serous Retinal Detachments Following Diode Laser Treatment for Retinopathy of Prematurity**

We report a rare retinal complication in a premature infant undergoing diode laser treatment for retinopathy of prematurity (ROP).

**Report of a Case.** A male infant (triplet 2) was born at 27 weeks’ postconceptional age at a birth weight of 810 g. Retinopathy of prematurity was present when he was screened at 31 weeks’ postconceptional age. Threshold ROP was reached at 33 weeks (8-9 cumulative clock hours of stage 3 ROP in zone 2 with plus disease in 4 quadrants bilaterally). Both eyes received indirect diode laser treatment (400-mW intensity/400-millisecond duration; 1200 burns OD and 840 burns OS). No retinal problems were noted following treatment. This infant also developed grade 4 intraventricular hemorrhage. Triplet 3 (female; 990-g birth weight) developed ROP bilaterally but did not reach threshold. All 3 infants received supplemental oxygen.

All infants undergoing ROP screening and treatment underwent dilation with a combination of 0.5% cyclopentolate hydrochloride and 0.5% hydrochloride and 2.5% phenylephrine drops (repeated once). When diode laser treatment is indicated, children are sedated with intravenous morphine.

**Comment.** Bilateral serous retinal detachment with pigmentary macular change following diode laser treatment for ROP has not been previously re-