

Cyclodialysis occurred in our patient because the implant was apparently placed unintentionally into the supraciliary space. This maneuver disinserted the ciliary body from the scleral spur in a fashion similar to that performed intentionally in the past using a spatula for the treatment of glaucoma. The internal pars plana incision may have been smaller than its external scleral counterpart and contributed to the capture of the implant by the pars plana epithelium. To possibly prevent this complication, care must be made to ensure that the pars plana incision is as long as the external scleral incision. The wound can be slightly gaped to confirm this. In addition, the implant should fit easily into the wound with minimal resistance. If unusual resistance is encountered, the wound should be reevaluated.

Our patient had no adverse consequences from the cyclodialysis cleft. This may be owing to the mechanism in which the cleft was formed and its anatomy. The full-thickness incision of the pars plana with subsequent inflammation and healing may have caused the cleft to be nonfunctional. Cyclodialysis formation, although rare, is a complication that can occur with the placement of a ganciclovir implant.

Ronald C. Gentile, MD
John M. Lewis, MD
James E. Puklin, MD
Detroit, Mich

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Reprints: James E. Puklin, MD, Kresge Eye Institute, 4717 5th Avenue, Detroit, MI 48201-1423.

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Hydrogel Explant Fragmentation 10 Years After Scleral Buckling Surgery

Materials used for scleral buckling procedures in retinal detachment repair have evolved from absorbable tissues, including autogenous fascia lata and cadaveric sclera or dura mater, to nonabsorbable synthetic agents such as polyethylene tubing, solid silicone rubber, silicone sponges, and hydrogels. Hydrogels are hydrophilic materials formed from 3-dimensional polymer networks. The most widely used hydrogel is co-poly(methylacrylate-2-hydroxyethyl acrylate), or MIRAgel (MIRA, Waltham, Mass). The forerunner of MIRAgel, MAL, has the same chemical composition. Hydrogels are permeable to water and low-molecular-weight hydrophilic substances. Their ability to absorb and then slowly release water-soluble antibiotics offers an advantage over silicone. Ho et al¹ reported that the MAL implant was as effective a buckling element as either solid silicone rubber or silicone sponge. He noted that the degree of swelling of the explant could be altered by varying its state of hydration, its softness and elasticity were protective against erosion, and it was less prone to infection because of its lack of dead spaces and its ability to absorb, then gradually release antibiotics.

The apparent effectiveness and safety of MAL hydrogel scleral explants was reported by Tolentino et al² who followed up 82 eyes of 79 patients for 6 to 53 months and found no complications of buckle extrusion, erosion, or infection. However, with longer follow-up of 7 to 11 years, 7 complications of MAL explants were documented by Marin and colleagues.³ Clinical manifestations ranged from benign subconjunctival bulging to intraocular erosion and migration of the explant. At the time of surgery, the

explants were seen to be translucent, gel-like, and friable. Erosion into the vitreous cavity occurred in 1 case and was complicated by difficulty grasping the friable buckle material. Micro-Fourier transform infrared spectroscopic analysis of 2 recovered implants demonstrated hydrolytic degradation of the implant leading to swelling significantly greater than the original polymer. We report the first case, to our knowledge, of scleral buckle extrusion and fragmentation associated with a MIRAgel episcleral explant.

Report of a Case. A 53-year-old man with high myopia was referred in August 1996 for evaluation of an extruding scleral buckle in the right lower eyelid. In 1986, he had undergone a scleral buckling procedure for a macula-on rhegmatogenous retinal detachment of the right eye. The patient had undergone placement of an encircling 4-mm MIRAgel buckle with a radial silicone sponge at the 10-o'clock position. The retina was attached postoperatively. However, limitation of adduction and infraduction in the right eye developed in 1988 and progressively worsened over time. In 1996, the patient was referred because of significant discomfort and diplopia on primary gaze and downgaze.

On presentation, his visual acuity was 20/20 OD. Motility examination findings revealed complete loss of adduction and infraduction, and mild limitation of supraduction in the right eye. The scleral buckle was easily palpable through the right lower eyelid. Indirect ophthalmoscopy of the right eye revealed cryotherapy scars superotemporally, the retinal break well-supported on a high scleral buckle. The patient was informed of the risk for postoperative retinal redetachment, but chose to proceed with surgery to remove the buckle.

At the time of removal of the scleral buckle, the MIRAgel buckle material was partially encapsulated, extremely friable, and fragmented. Prior to any manipulation, the explant was seen to be severed at points of contact with the residual scleral buckling sutures. Frag-



Fragments of hydrogel scleral buckle material removed from orbit.

ments of the MIRAgel buckle were lodged within the incomplete fibrous capsule and within the Tenon capsule. Careful inspection was required to ensure that all fragments were removed from the orbital soft tissues (**Figure**). The retina remained attached postoperatively, and the visual acuity stabilized at 20/20 OD at 3 months. The patient became onhophoric in primary gaze, with mild remaining restriction of adduction and infraduction in the right eye.

Comment. This case represents the first reported breakdown of a MIRAgel scleral buckle. Its occurrence should not be surprising, as 7 cases of complications with the MAI explant, composed of the same hydrogel material, have been reported in the past. The mechanism of fragmentation and degradation likely resembles that reported with the MAI explant; hydrolysis of the material with resultant swelling. The presence of an incomplete capsule surrounding the buckle in our patient may have facilitated access of orbital fluid to the explant. Similar to the report by Marin et al,³ these changes appeared approximately 10 years after explant placement. The findings in this patient illustrate the need to anticipate potential friability and swelling of MIRAgel buckle material and to meticulously search for fragments during removal of

long-standing explants. Our observation together with the historical data suggest that there are no real advantages of MIRAgel and MAI over silicone for use as scleral buckling material.

Kathy I. Hwang, MD
Jennifer I. Lim, MD
San Francisco, Calif

Reprints: Kathy I. Hwang, MD, 3301 N Mexico Ave NW, Washington, DC 20016

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Latanoprost and Hyperpigmentation of Eyelashes

Latanoprost (Xalatan, Pharmacia Upjohn Co, Kalamazoo, Mich) is the first new class of antiglaucoma medication introduced in 20 years. Initial reports about its ocular hypotensive effects seem to be promising, but it has an intriguing side effect of increasing iris pigmentation. On a theoretical basis, hyperpigmentation of periocular structures also

might be expected. To our knowledge, this may be the first reported case of increased pigmentation of eyelashes from topical latanoprost.

Report of a Case. During the course of 6 years, a 65-year-old woman with open-angle glaucoma developed allergy and intolerance to topical β -blockers, pilocarpine hydrochloride, dorzolamide hydrochloride, and apraclonidine hydrochloride. Argon laser trabeculoplasty provided only transient control of the intraocular pressure (IOP). Because of progressing disc changes and visual field changes in her left eye, she was enrolled in the Latanoprost Compassionate Use Study (Hartford Hospital, Hartford, Conn). The pretreatment protocol included a comprehensive ocular examination, disc and iris photographs, visual fields, and a signed consent form approved by the Hartford Hospital institutional review board.

Her pretreatment visual acuity was 20/20 OU and her IOP was 20 mm Hg OD and 27 mm Hg OS. Pertinent ocular findings included a cup-disc ratio of 0.5 OD and 0.8 OS. The color of the irides were light gray with a light brown pigmented pupillary margin. The visual field was normal in the right eye and there were scattered spots of depression in the inferior arcuate region of the left eye. Treatment with topical 0.005% latanoprost, 1 drop (~20 μ L) at 8 PM every evening, was started in her left eye on May 15, 1996. On her 1-month visit on June 18, 1996, her IOP was 20 mm Hg OD and 15 mm Hg OS. Results from the visual acuity and ocular examination were completely unchanged, except she had one in-turned eyelash on her left lower eyelid. The offending eyelash was epilated. On her 2-month visit on July 16, 1996, the IOP was 28 mm Hg OD and 17 mm Hg OS and the ocular examination results were unchanged. On her 3-month visit on August 21, 1996, her IOP was 20 mm Hg OD and 15 mm Hg OS. Results of her ocular examination were again unchanged but she had another in-turned eyelash on her left [Fig 1].