XIPERE InXights
XIPERE Patient Case Study Series

TREATMENT OF POSTOPERATIVE CYSTOID MACULAR EDEMA ASSOCIATED WITH POSTERIOR UVEITIS

SPONSORED BY BAUSCH + LOMB

Cystoid macular edema (CME) is a primary cause of reduced visual function following a variety of surgical procedures, including cataract surgery.[1] Thanks to the introduction of phacoemulsification, the incidence of pseudophakic CME following cataract surgery has decreased significantly; however, CME remains the most frequent postoperative complication resulting in impaired vision.[1] Although postoperative CME following cataract surgery is typically self-limiting, persistent CME can sometimes be therapeutically challenging for ophthalmologists and has the potential to impose substantial healthcare costs.[1] Anti-inflammatory therapy with ocular corticosteroids—inclusive of both topical and injectable corticosteroids—is a mainstay of treatment of postoperative CME.[1]

DANNY MAMMO, MD
Cleveland Clinic
Cleveland, OH

Danny Mammo, MD, is a paid consultant of Bausch + Lomb.

Here, I describe a patient with postoperative CME associated with posterior uveitis who showed poor response to topical anti-inflammatory drops. This patient was then treated with a single injection of XIPERE® (triamcinolone acetonide injectable suspension) 40 mg/mL, which delivers corticosteroid via the suprachoroidal route, specifically depositing the steroid in the compartment between the choroid and sclera.[2] Following the XIPERE injection, the patient's CME resolved. This case affords a valuable opportunity to learn about the clinical utility of XIPERE for postoperative CME and my best practices when administering a XIPERE injection.

INDICATION

XIPERE® (triamcinolone acetonide injectable suspension) for suprachoroidal use is a corticosteroid indicated for the treatment of macular edema associated with uveitis.

IMPORTANT SAFETY INFORMATION

Patients should be monitored following injection for elevated intraocular pressure. See Dosage and Administration instructions in full Prescribing Information.

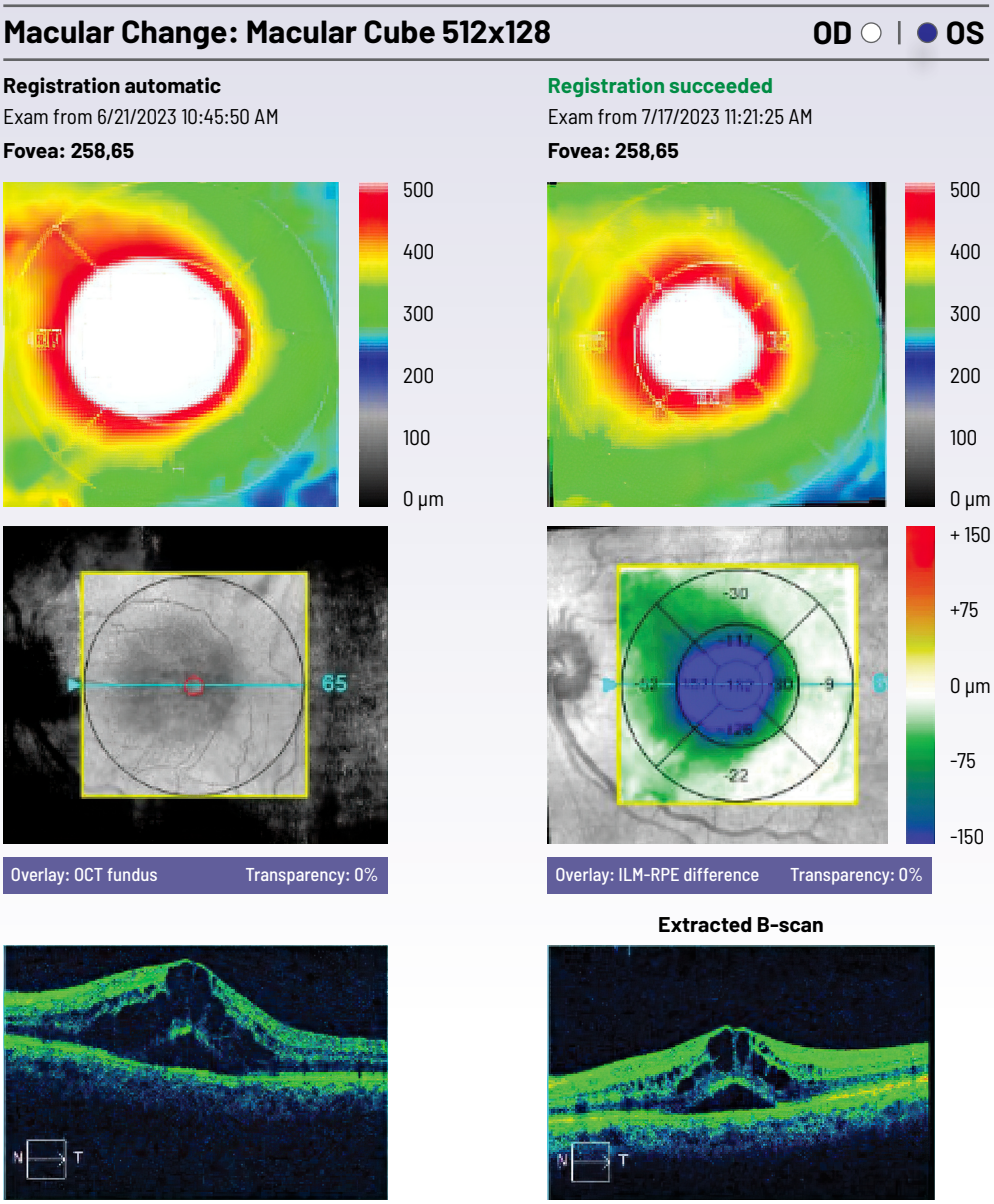
Please see additional Important Safety Information throughout and full Prescribing Information here.

XIPERE® (triamcinolone acetonide injectable suspension) 40 mg/mL

Case Report: A Patient With Postoperative CME Associated With Posterior Uveitis

BACKGROUND: The patient was a 63-year-old African American female. Her medical history included hypertension and hyperlipidemia, which were adequately controlled with medication. Her family history included a father with hypertension.

DIAGNOSIS: The patient presented at my practice complaining of blurry vision and distortions in her left eye following cataract surgery. Spectral-domain optical coherence tomography (SD-OCT) imaging revealed the presence of CME. Based on this finding, the timing of CME, and the presence of ocular inflammation in the posterior chamber, a diagnosis of postoperative CME associated with posterior uveitis was made.



ILM=internal limiting membrane; RPE=retinal pigment epithelium.

Figure 1. Treatment-resistant CME following topical therapy. The left column depicts macular presentation while on topical prednisolone acetate and ketorolac. The right column depicts macular presentation after 1 month of topical difluprednate.

Please see additional Important Safety Information throughout and full Prescribing Information here.

XIPERE® (triamcinolone acetonide injectable suspension) 40 mg/mL

TREATMENT: Upon referral to my practice, the patient had already been administered topical prednisolone acetate and ketorolac, which had no effect on her CME. The patient was then administered topical difluprednate, which had only a mild effect (**Figure 1**).

Fluorescein angiography also revealed evidence of disc and retinal vascular leakage (**Figure 2**). At this point, the patient's best corrected visual acuity in her left eye was 20/60, her central subfield thickness was 637 µm, and her intraocular pressure was 11 mmHg.

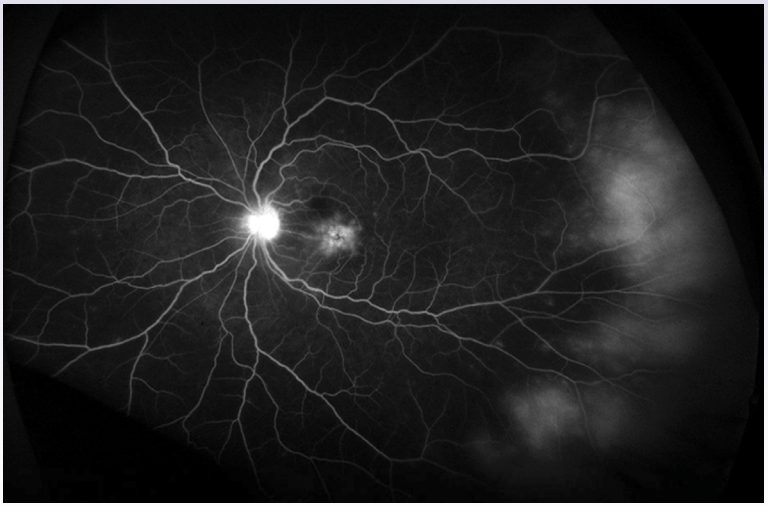


Figure 2. Late-phase fluorescein angiography demonstrating disc leakage, macular petaloid leakage, and peripheral large-vessel leakage.

I discussed the patient's treatment options, which included an increase and continuation of difluprednate, periocular corticosteroids, and intraocular corticosteroids administered using a suprachoroidal approach (ie, XIPERE®) vs an intravitreal approach (ie, dexamethasone intravitreal implant). The primary treatment goals for this patient were to resolve her treatment-resistant CME and improve visual function.

The decision was made to administer a single injection of XIPERE in the patient's left eye. Prior to injection, I administered subconjunctival lidocaine and waited 7 to 10 minutes for the subconjunctival bleb to flatten. I then administered XIPERE as a superior suprachoroidal injection with a 900-µm needle. (XIPERE includes both 900- and 1100-µm needles; the longer needle may be used at the treating physician's discretion.[2])

At the patient's follow-up visit, she showed good resolution of CME on SD-OCT, but there was still room for further improvement of the damaged ellipsoid zone as it continued to reconstitute (**Figure 3**). The patient's best-corrected visual acuity in her left eye was 20/40, her central subfield thickness was 268 µm, and her intraocular pressure was 13 mmHg. Use of anti-inflammatory eye drops was discontinued.

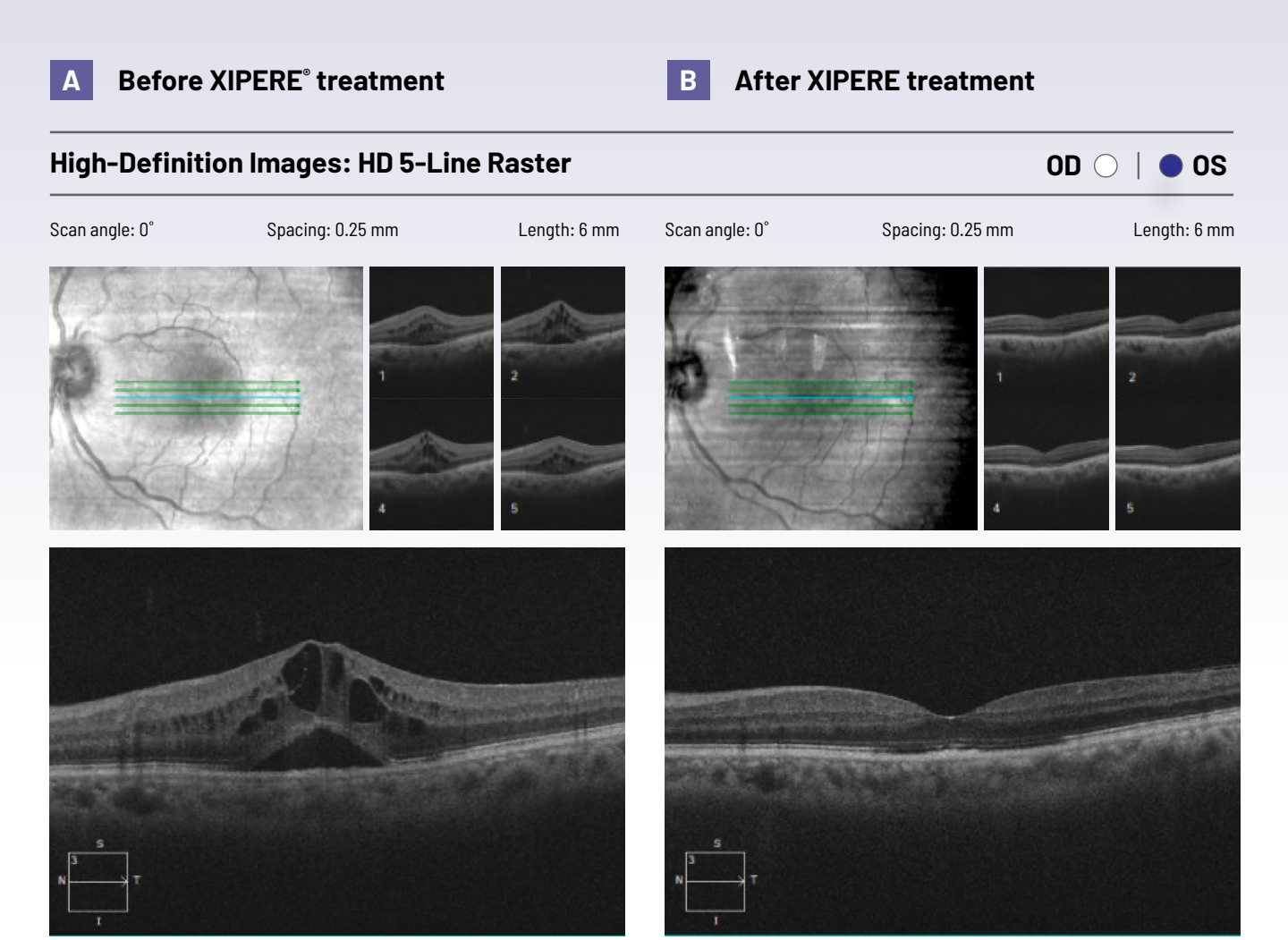


Figure 3. Resolution of postoperative CME with XIPERE. (A) SD-OCT before XIPERE treatment, demonstrating significant CME while on topical difluprednate. **(B)** SD-OCT after XIPERE treatment, demonstrating complete resolution of CME with subfoveal ellipsoid zone disruption.

IMPORTANT SAFETY INFORMATION (CONT'D)

- XIPERE® is contraindicated in patients with known **hypersensitivity to triamcinolone acetonide** or any other components of this product.

Please see additional Important Safety Information throughout and full Prescribing Information here.

XIPERE®
(triamcinolone acetonide injectable suspension) 40 mg/mL

WHY XIPERE®?

This patient had persistent uveitic macular edema in her left eye, which failed to respond to topical anti-inflammatory therapy. I turn to XIPERE for patients with uveitic macular edema who fail to completely respond to their topical anti-inflammatory drops. I find XIPERE useful in patients with a history of controlled glaucoma, ocular hypertension, or steroid response.

The efficacy of XIPERE was assessed in a 6-month, randomized, multicenter, double-masked, sham-controlled study in patients with macular edema associated with anterior, intermediate, or posterior uveitis, or panuveitis (PEACHTREE); patients were treated at baseline and Week 12.[2,3] Study enrollees were allowed to have a history of prior cataract surgery, but cataract surgery had to have been performed at least 3 months prior to the second study visit.[3]

In PEACHTREE, a statistically significantly greater proportion of patients treated with XIPERE achieved a ≥15-letter improvement in best-corrected visual acuity than control patients did at Week 24 (47% vs 16%, respectively; $P<0.01$).[2] In a noninterventional extension study of PEACHTREE, called MAGNOLIA, XIPERE was shown to provide durable efficacy with the potential to last up to a year following 1 or 2 injections.[4] The most common adverse reactions reported by ≥10% of patients and at a rate greater than control included elevated intraocular pressure and eye pain.[2]

OPTIMAL PRACTICES AND GUIDELINES FOR EFFECTIVE XIPERE APPLICATION

Timely treatment is crucial for resolving uveitic macular edema

- Provide appropriate preprocedure counseling by describing the applied pressure, procedure duration, possibility of a needle exchange, and possibility of an anterior chamber tap. This ensures no surprises for the patient, which, in turn, is less stressful for both you and the patient
- After applying subconjunctival lidocaine, wait longer than you would for intravitreal injections. In my experience, this leads to less pain and near resolution of the subconjunctival bleb
- Make sure to inject at least 4.0 mm posteriorly
- Be patient and inject slowly
- Be patient with subtle maneuvers with the 900-µm needle before switching to the 1100-µm needle. Switch needles if necessary, noting that the patient will be aware of this possibility if provided appropriate counseling

IMPORTANT SAFETY INFORMATION (CONT'D)

- Use of corticosteroids may produce cataracts, increased intraocular pressure, and glaucoma. Use of corticosteroids may enhance the establishment of secondary ocular infections due to bacteria, fungi, or viruses, and should be used cautiously in patients with a history of ocular herpes simplex.

Please see additional Important Safety Information throughout and full Prescribing Information here.

XIPERE®
(triamcinolone acetonide injectable suspension) 40 mg/mL

IMPORTANT SAFETY INFORMATION (CONT'D)

- Hypothalamic-pituitary-adrenal (HPA) axis suppression, Cushing's syndrome, and hyperglycemia can occur following administration of a corticosteroid. Monitor patients for these conditions with chronic use.
- In controlled studies, the most common ocular adverse reactions were increased ocular pressure, non-acute (14%), eye pain, non-acute (12%), cataract (7%), increased intraocular pressure, acute (6%), vitreous detachment (5%), injection site pain (4%), conjunctival hemorrhage (4%), visual acuity reduced (4%), dry eye (3%), eye pain, acute (3%), photophobia (3%), and vitreous floaters (3%), and in 2% of patients: uveitis, conjunctival hyperaemia, punctate keratitis, conjunctival oedema, meibomianitis, anterior capsule contraction, chalazion, eye irritation, eye pruritus, eyelid ptosis, photopsia, and vision blurred.

  The most common non-ocular adverse event was headache (5%).
- Corticosteroids should be used during pregnancy or nursing only if the potential benefit justifies the potential risk to the fetus or nursing infant.

You are encouraged to report negative side effects of prescription drugs to the FDA. Visit www.fda.gov/medwatch or call 1-800-FDA-1088

Please see additional Important Safety Information throughout and full Prescribing Information here.

References: 1. Zur D, Loewenstein A. Postsurgical cystoid macular edema. *Dev Ophthalmol*. 2017;58:178-190. **2.** XIPERE® [prescribing information]. Alpharetta, GA. Clearside Biomedical, Inc. **3.** Yeh S, Khurana RN, Shah M, et al. Efficacy and safety of suprachoroidal CLS-TA for macular edema secondary to noninfectious uveitis: phase 3 randomized trial. *Ophthalmology*. 2020;127(7):948-955. **4.** Khurana RN, Merrill P, Yeh S, et al. Extension study of the safety and efficacy of CLS-TA for treatment of macular oedema associated with non-infectious uveitis (MAGNOLIA). *Br J Ophthalmol*. 2022;106(8):1139-1144.

BAUSCH + LOMB

XIPERE®
(triamcinolone acetonide injectable suspension) 40 mg/mL