

Patient Case: Dry Eye Disease With Inflammation

Transcript

[ISI voiceover]

Indication

Xiidra® (lifitegrast ophthalmic solution) 5% is indicated for the treatment of signs and symptoms of dry eye disease (DED).

[McDonald]

Hi everyone. Thank you for attending this program.

I'm Dr. Marguerite McDonald. I'm a clinical professor of ophthalmology at NYU and Tulane. I'm also an anterior segment cornea specialist with Oakley Vision on Long Island. And this is an educational program sponsored by Bausch & Lomb and it is not a CME accredited program. And today we're going to review a very interesting patient case, symptomatic dry eye with inflammation.

And before starting, I'd like to acknowledge my friend Dr. Paul Karpecki for his contributions to the clinical images.

So our patient is a 58-year-old female. She's an office manager for a busy dental practice. As far as her medical history, she has no significant medical history of dry eye or related conditions other than mild and well-controlled hypertension, and she's not a smoker.

She presents with redness and fluctuating vision, which is worse toward the end of her workday, gritty and tired eyes, and complaints of burning and itchy eyes, especially after a day of computer use at work. As far as reported treatment history, the patient has been using various artificial tears for the past few months with limited relief. And there's temporary improvement in symptoms immediately after application but only for about five minutes.

So the key clinical findings are shown here. The slit lamp exam and conj[unctival] staining are such that she has grade 1+ corneal staining in the interpalpebral and central zones. 2+ conjunctival injection redness, a reduced tear breakup time to 8 seconds indicating tear film instability. Her SPEED or psychometric testing score is 6. She has trace 1+ meibomian gland [inspissation] without scurf and her tear osmolarity scores are 324 and 339 milliosmoles per liter.

So this clinical workup indicates early stage dry eye disease characterized by mild symptoms and signs. The presence of grade 1 staining and ocular redness suggests possible ocular surface inflammation. She's working in a busy dental practice and she's concerned that using artificial tears during the day may smudge her makeup, which may also lead to irritation. So she also reports that her artificial tears only provide limited relief anyway, particularly by the end of the day.

It's common to see patients like her who have early signs of inflammation, including redness and staining. In my experience, early identification and treatment of the inflammatory component of dry eye disease usually leads to good patient outcomes and satisfaction.

So, as the foundational strategy, my approach when patients come in is to educate them about dry eye and how to best manage it. Many folks might give up if they don't understand that it's a chronic issue. I stress that they need to keep up with treatment, even when symptoms ease. And I'd cover how to manage the risk factors and also go over things that can change in their daily lives, including the 20/20/20 rule for screen time. Every 20 minutes, stand up for 20 seconds and look 20 feet away. I also explain why prescription treatment could be a good treatment choice as early intervention can prevent lack of a gland damage and infiltration by inflammatory cells.¹ Simple steps like warm compresses, lid scrubs and supplements are foundational.²

So, after providing patient education and establishing basic self-care, if this patient is your patient, what would you be recommending [as the] next-step? Would it be to introduce prescription Xiidra® (lifitegrast ophthalmic solution) 5% BID, recommend cyclosporine BID, or suggest punctal plugs?

This patient is a common case in my practice. Female, about 60s or older. And upon examination, eye redness and corneal staining that suggests possible ocular surface inflammation. The fact that she's seeing me suggests the dry eye symptom is affecting her daily life, and she'd like to see it improve as soon as possible.

Xiidra, lifitegrast ophthalmic solution, 5% has been available in the US for nearly 10 years now and has been a proven dry eye treatment that I have a lot of success with across a broad range of patients.³ Xiidra was specifically designed to inhibit dry eye inflammation. Please note that the exact mechanism is not known.^{3*} Xiidra has delivered early symptom relief in as little as 2 weeks that builds over time.^{3†} The safety and efficacy of Xiidra were assessed in four multi-center, randomized, prospective, double-masked, placebo-controlled studies involving 2,133 patients. The most common adverse reactions reported in 5% to 25% of patients were instillation site irritation, altered taste sensation, dysgeusia, and reduced visual acuity.³

*The exact mechanism of Xiidra in dry eye disease is not known.³

†Xiidra significantly reduced symptoms of eye dryness at 2 weeks in 2 of 4 studies, with improvements observed at 6 and 12 weeks in all 4 studies.³

Together with proper patient education and clear treatment expectations, many of my patients return and remain on Xiidra. Given the patient's dry eye symptoms, the likelihood of clinically significant ocular inflammation and minimal relief from artificial tears, Xiidra could be a rapid and effective treatment option.³ An important insight to improve patient satisfaction with Xiidra is ensuring they know what to expect. This is why I go over what they can expect from their Xiidra treatment, both in terms of how long it may take for the treatment to start working, and any potential side effects. As with any treatment, I make it a priority to educate patients from the start.

As for why I didn't choose options 2 and 3. Well, option 2, cyclosporine works differently than does Xiidra. It works on inactive T-cells.^{1,4} Unlike cyclosporine, Xiidra not only blocks inactive T-cells from activating, it also works on active T-cells, and it inhibits their migration to the ocular surface and reduces the release of proinflammatory cytokines.^{3,4} Option 3, punctal plugs are appropriate for managing aqueous-deficient dry eye.⁵

However, given the potential presence of ocular surface inflammation in this case, their use could risk prolonging inflammatory activity by sequestering it on the ocular surface.⁵ In summary, it's best to wait on punctal plugs until the inflammation is under control.⁵

So, the results at her 4-week follow-up. Xiidra BID was prescribed and covered by the patient's commercial insurance. The revisit was scheduled, as you see, after about four weeks of treatment. She returned after one month and was happy with her regimen. The patient reported the gritty, tired, or burning sensation, and her fluctuating vision have improved after 2 weeks. Her end of day dryness improved even though she indicated her use of artificial tears had decreased by about 80 to 90%. I also didn't observe the eye redness that was previously noted during her last visit.

[ISI voiceover]

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Xiidra[®] (lifitegrast ophthalmic solution) 5% is indicated for the treatment of signs and symptoms of dry eye disease (DED).

Important Safety Information

- Xiidra is contraindicated in patients with known hypersensitivity to lifitegrast or to any of the other ingredients.
- In clinical trials, the most common adverse reactions reported in 5-25% of patients were instillation site irritation, dysgeusia, and reduced visual acuity. Other adverse reactions reported in 1% to 5% of the patients were blurred vision, conjunctival hyperemia, eye irritation, headache, increased lacrimation, eye discharge, eye discomfort, eye pruritis, and sinusitis.
- To avoid the potential for eye injury or contamination of the solution, patients should not touch the tip of the single-use container to their eye or to any surface.
- Contact lenses should be removed prior to the administration of Xiidra and may be reinserted 15 minutes following administration.
- Safety and efficacy in pediatric patients below the age of 17 years have not been established.

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 Full Prescribing Information at Xiidra-ecp.com

[McDonald]

Thank you for spending a few minutes with me to learn about dry eye disease and Xiidra. Xiidra is a preferred treatment in my practice for patients like this who have dry eye caused by inflammation. Thanks again.

References

1. de Oliveira RC, Wilson SE. Practical guidance for the use of cyclosporine ophthalmic solutions in the management of dry eye disease. *Clin Ophthalmol.* 2019;13:1115-1122. doi: 10.2147/OPTH.S184412
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3. Xiidra. Prescribing information. Bausch & Lomb Inc.
4. Cequa. Prescribing Information. Sun Pharmaceutical Industries, Inc.
5. Considerations for lacrimal occlusion in the moderate dry eye patient. American Academy of Ophthalmology website. Accessed July 23, 2025. <https://www.aao.org/assets/aae1bce0-8794-4644-86de-aaa86b4bc5fb/636026432292770000/july-2016-clinical-update-external-disease-pdf>