

Review of Optometry and CooperVision Present:

ALIGNING PRACTICE WITH PERCEPTION

A Global Roundtable

Practical Approaches to Fitting
Daily Disposable
Silicone Hydrogel Lenses

A Supplement to

REVIEW[®]
OF OPTOMETRY

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DEAR COLLEAGUES,

Daily disposable silicone hydrogel contact lenses have been available for approximately 10 years, yet currently only half (52%) of daily disposable fits are in silicone hydrogel materials.¹ At face value, that may not sound very shocking, but consider this: Eye care practitioners (ECPs) fit 88% of their monthly and two-week contact lens wearers in silicone hydrogel lenses.² If we are compelled to fit the vast majority of our frequent replacement wearers in silicone hydrogel, why do we hesitate when prescribing for daily disposable wearers? This is a primary focus of the following roundtable.

In this report, an esteemed panel of contact lens practitioners will analyze the disconnect between what we believe or desire and what we ultimately prescribe. As you'll learn, we have strong opinions about the ocular health benefits of daily disposable silicone hydrogels, yet our tendency to prescribe them doesn't reflect these beliefs. In the pages that follow, we will explore why this might be the case and what practical steps ECPs can take to make sure that they always endeavor to prescribe the most appropriate, healthy lens option they can for each patient.

As you know, much of what we do is steeped in habit or rooted in fear that patients may not like what we have to say, but as these panelists eloquently explain, prescribing daily disposable silicone hydrogel doesn't go against the grain of their practice patterns nor does it negatively affect their relationships with patients. On the contrary, their patients are happy and their practices thrive when what they do aligns with what they believe is best for their patients.

-PAUL M. KARPECKI, OD, FAAO

Evidence for Daily Disposable Silicone Hydrogel Lenses

DR. KARPECKI: Does the literature provide sufficient support for making silicone hydrogel the first choice material for daily disposable wearers?

DR. PARK: The research has clearly demonstrated that daily disposable silicone hydrogels are the way forward. I feel strongly that I have a professional standard to uphold, and ignoring the research in this area would be a disservice to my profession and to my patients.

DR. FROGOZO: The relevance of lens power in the research is also very compelling. A lot of my patients have high prescriptions, which means their lenses may not meet the oxygen delivery requirements if they are wearing a hydrogel lens. When you are selecting a contact lens, oxygen transmissibility across the entire lens should be a consideration, especially with high prescriptions or thicker designs such as torics.

DR. ROTH: The evidence needs clinical context. We're seeing many highly ametropic patients presenting to our practice wearing daily disposable hydrogel lenses with some hypoxia related changes. It's remarkable that these high prescription eyes look the same to me as what I witnessed years ago in patients who wore conventional

frequent replacement hydrogel lenses. This tells me we need to be more proactive and take a preventive approach when selecting an optimum lens.

DR. KARPECKI: That's an excellent point. In fact, 92% of ECPs say silicone hydrogel daily disposable lenses are the best choice to safeguard their patients' eye health related to contact lens wear.³ Is health the driving factor in your decision to fit daily disposable silicone hydrogel lenses?

DR. HOGAN: I practice in the Chicago area, and we're five minutes away from the top trauma center, which means we see health providers who work long shifts, first responders, firemen, police officers and others who are pushing the limits on all fronts. I worry about these patients because their lifestyles and the conditions they work in subject them to challenges that, in my mind, necessitate as much oxygen as I can offer.

DR. PARK: We also have to be suspicious about whether patients are being honest with us or are just reciting what they think we want to hear. We have to educate patients and imagine the worst-case scenario in terms of how they're wearing their lenses.

DR. HOGAN: The fact that we fit 88% of our monthly and two-week replacement contact lens wearers in silicone hydrogel lenses³ is, in my mind, an indication that ECPs inherently know the oxygen delivery benefits of the material.

Barriers to Prescribing Daily Disposable Silicone Hydrogel

DR. KARPECKI: If we recognize the ocular health benefits

Support in the Literature

The panel's literature review of the ocular health benefits of silicone hydrogel in general and daily disposable silicone hydrogel, in particular, overwhelmingly supports making these lenses a first choice.

• **"Evidence supports the routine prescribing of silicone hydrogel contact lens materials in preference to conventional hydrogels for daily wear use to avoid deleterious clinical sequelae due to corneal hypoxia."**

Morgan P, Brennan N, Maldonado-Codina C, et al. Central and peripheral oxygen transmissibility thresholds to avoid corneal swelling during open eye soft contact lens wear. *J Biomed Mater Res Part B: Appl Biomater.* 2009;92:361-5.

• **"... [silicone hydrogel contact lenses] undeniably provide a superior environment than hydrogels by promoting normal corneal metabolic activity."**

Brennan N, Morgan P. Clinical highs and lows of Dk/t. Part 1 – Has oxygen run out of puff? *Optician.* 2009;238(6209):16-20.

• **"To avoid hypoxia in daily wear, we recommend using silicone hydrogels."**

Brennan N, Morgan PB. Another view of oxygen transmission. *Contact Lens Spectrum.* 2005 Dec; 48.

of daily disposable silicone hydrogel lenses, why aren't we prescribing them more often?

DR. ROTH: We may be victims of the times and victims of our own success. Think about what we were concerned with in the not-so-distant past. We were so worried about contact lens associated papillary conjunctivitis (CLPC), deposition, and oxygen transmission that then when daily disposable lenses came along, it was a huge game changer. For the greater part, we moved from broken to not broken. That's easy to explain to practitioners as well as to patients. But when you add silicone hydrogel to the daily disposable mix, some practitioners reverted back to waiting for it to break before fixing it. We are fortunate that we don't have to "wait and see" this time, so we should make the most of it.

DR. FROGOZO: That's true,

but a lot of ECPs are hesitant to prescribe daily disposable silicone hydrogel lenses because they perceive them as too expensive.

DR. PARK: We're also embarrassed to talk about it.

DR. PAL: We do make a lot of assumptions. It's unfortunate that we persist in worrying about other people's expenses and guessing at what they can afford. We have no idea what a patient's budget is or what they want to spend it on.

DR. HOGAN: Cost seems to bother optometrists more than it bothers patients. Patients rely on us to tell them what's best for them. They don't expect us to project our expectations about what they can or cannot afford.

DR. KARPECKI: Some ECPs believe that allergy may be a barrier to silicone hydrogel lens wear. However, the literature is starting to increase awareness

that we may have been misinterpreting allergy. Where do you stand on this issue?

DR. PARK: A recent publication that reviewed the etiology of allergic response concluded that silicone has none of the properties that would elicit a true allergic response.⁴

DR. LAUENBORG: While silicone allergy is not biologically possible,⁵ there are ocular responses, such as contact lens-induced papillary conjunctivitis, that may mimic some of the signs and symptoms of allergic eye disease.

DR. FROGOZO: I've seen contact lens-induced papillary conjunctivitis in monthly silicone lenses due to a response to deposits or the use of care solutions. Notably, I have not seen this response in my daily disposable silicone hydrogel patients who are wearing their lenses as directed.

DR. HOGAN: Before we converted our monthly silicone hydrogel patients to daily disposable lenses, we were seeing a lot of deposition and discomfort that some ECPs might refer to as an allergy, but that's not really an accurate descriptor.

DR. ROTH: In my opinion, it's a myth and I don't see evidence of silicone allergy in daily disposable wearers. There may be other factors in play like modulus.

DR. KARPECKI: Are there any other barriers to prescribing daily disposable silicone hydrogel more frequently?

DR. LAUENBORG: Comfort may be another concern. And keep in mind that comfort is very individual.

DR. ROTH: That's why it's so important to give patients the opportunity to try silicone hydrogel lenses, as with any other, even if they are wearing their

hydrogels without complaint.

DR. FROGOZO: When I first tried to wear a daily disposable silicone hydrogel, I thought it was uncomfortable. But not all lenses are the same. You shouldn't generalize or assume that a patient categorically dislikes silicone. In my case, I found that a lower modulus made a huge difference in terms of my personal comfort.

Comfort of Daily Disposable Silicone Hydrogel Lenses

DR. KARPECKI: Most doctors cite comfort as a benefit, rather than a problem with daily disposable silicone hydrogel. For example, 80% agree that silicone hydrogel daily disposable lenses are more comfortable than hydrogel daily disposable lenses.³ What is your opinion on daily disposable silicone hydrogel comfort?

DR. HOGAN: Many practitioners are concerned about silicone hydrogel being less comfortable, but research shows that some patients actually prefer silicone hydrogel lenses for comfort.⁶

DR. PARK: The literature also reveals that more non-lapsed wearers than lapsed wearers wore silicone hydrogel contact lenses (49% versus 38%).⁷

DR. PAL: The other component to comfort is that patients aren't always forthcoming because they're afraid you'll take them out of contact lenses. Many patients also have the misconception that a little bit of discomfort is a normal part of wearing contact lenses. It helps to ask how patients feel at different times of the day, starting with the morning and moving on to end of the work day or evening.

DR. KARPECKI: I completely agree. Patients who say they are 'fine' are often not happy at all.

The acronym for fine is 'feelings I'm not expressing.' The bottom-line is that we want to maximize comfort to prevent dropout. How do we do that?

DR. FROGOZO: I would switch lenses. According to data, 87% of ECPs say that if they want to keep patients from dropping out of lens wear, they would refit them with daily disposable silicone hydrogel lenses.³

DR. LAUENBORG: In terms of comparing comfort, it's important to keep the patient in the new daily disposable silicone hydrogel for at least a month because some of the patients whom you switch have residual hypoxia. When you move to a lens that suddenly delivers more oxygen, the cornea may become very sensitive.

DR. PAL: I also recommend a lubricating eye drop to each contact lens patient. I want new contact lens wearers to get into the habit of using them in conjunction with their lenses. Device and computer use is so high that patients are very likely to experience dryness symptoms at some point in their lives. By making lubricants a normal part of their routine and

Fast Facts on Comfort*

- Almost 90% of ECPs agree that silicone hydrogel daily disposable lenses provide better long-term wearing comfort for their patients than hydrogel daily disposable lenses.
- 88% of ECPs say silicone hydrogel daily disposable lenses dehydrate less than hydrogel daily disposable lenses.
- 78% of ECPs agree that daily disposable silicone hydrogel lens wearers have lower dropout rates than wearers of other types of contact lenses.

* ECP perception of the benefits of 1 day silicone hydrogels. February 2018. Cello Health Insight. Data on file. Survey carried out online in US, UK and Japan. Total sample size n=300 (100 ECPs in each country).

by always having them readily available we are being proactive to help minimize dryness.

DR. ROTH: Recall is also an integral part of minimizing dropout.

DR. PAL: I agree 100 percent. Don't give your patient a pat on the back and a 'see you next year.' The lines of communication need to remain open.

DR. HOGAN: A post-visit survey has been helpful in terms of reducing drop out at our office. It's just as important to measure the patient's satisfaction outside the office as it is inside the office. For me the biggest challenge is the hydrogel lens patient who has no problems and doesn't want to change. What do you do when everything seems perfect? How do you start the conversation with these patients?

DR. PAL: I tell patients, "let me give you an opportunity to decide for yourself which lens you find more comfortable and a better fit for your lifestyle." Then I proceed to give them trial lenses and I book a follow up appointment with them.

DR. HOGAN: A daily disposable silicone hydrogel trial can be very enlightening for patients who think they're happy with their habitual lenses. These patients often don't realize how uncomfortable they were. I call this the power of a diagnostic trial.

DR. PAL: One important tip is to give your patients enough trials and time to see the benefits of this modality. A few days may not be enough for your patients to adjust to the new brand or material. If you want your patients to convert to daily disposable lenses, allow more time for them to truly adapt and experience the benefits of a daily disposable silicone hydrogel.

DR. ROTH: The parameters of discomfort are personal. Extending comfortable wearing time by

two hours can be a great success for some patients whereas other patients need much more. Particularly, if the patient works long hours at a computer and isn't blinking enough, we should offer tips on giving the eyes a break, blinking exercises, or using lubricants as needed.

Patient Satisfaction: What ECPs Are Saying

DR. KARPECKI: Let's move on to patient satisfaction. Eighty-eight percent of ECPs say patients who wear silicone hydrogel daily disposable lenses are more satisfied with their contact lenses than patients who wear hydrogel daily disposable lenses.³ Why do you think this is the case?

DR. FROGOZO: I think it's due to cosmesis. My previous hydrogel lens wearers have complained about red eyes. In my experience, daily disposable silicone hydrogel helps with that.

DR. HOGAN: Patients in my practice are very interested in wellness. They're drinking a lot of water, taking probiotics and following health-focused diet plans. This pervasive mindset in today's culture makes it a lot easier to recommend a daily disposable silicone hydrogel.

DR. KARPECKI: Ninety percent of our peers say silicone hydrogel daily disposable lenses provide a better wearing experience for their patients than hydrogel daily disposable lenses.³ When would you advocate switching to a daily disposable silicone hydrogel?

DR. ROTH: We have a great opportunity to focus on preventative care, and daily disposable silicone hydrogel is a great compliment to that dialogue.

DR. LAUENBORG: You have to be proactive with patients. One of my good friends had been

managing a patient for 10 years. She seemed happy enough in her habitual hydrogel lenses. Then she went on vacation and lost a contact lens. She saw a local doctor who gave her daily disposable silicone hydrogel lenses. When she got home, she switched optometrists.

DR. PAL: If years go by and you don't make any changes to the lens you prescribe, patients develop more of a commodity mindset, which can lead them to purchase lenses online. Offer something new so people have a reason to keep coming back.

DR. HOGAN: They may also hear about new technology on Facebook or other social media channels. You may not be recommending daily disposable silicone hydrogel lenses, but someone down the street from you might be, and if they are educating patients on social media about the benefits of lenses that you aren't fitting, they might not come back.

DR. KARPECKI: Do you think there's any benefit to a silicone hydrogel lens due to the high rate of digital device use we now see? How do you talk to patients about this?

DR. HOGAN: In our practice, we use the term 'digital dry eye.' It resonates with patients when we use this terminology.

DR. PARK: We discuss digital device use with patients as well, providing education on how it affects blink rate. Patients don't realize that they're not blinking. We're also not shy about recommending a preservative-free ocular lubricant. All of these strategies are aimed at maintaining satisfaction.

DR. LAUENBORG: I instruct my patients to follow the 20/20/20 rule: If you spend long hours in front of digital devices, make sure to take a 20-second break every 20 minutes and focus your

eyes on something else that is 20 feet away.

DR. FROGOZO: Patients have very demanding lifestyles, but we're learning how to meet them. In fact, 93% of ECPs agree that silicone hydrogel daily disposable lenses satisfy today's patients' demanding lifestyles.³ That's encouraging.

Communicating the Benefits of Daily Disposable Silicone Hydrogels

DR. KARPECKI: Eighty-eight percent of ECPs say that if they were asked to choose only one type of contact lens to fit on their patients, a silicone hydrogel daily disposable would be their choice.³ It seems apparent that daily disposable silicone hydrogel is not only a 'fix-it lens,' rather it meets the needs of a diverse population. With that in mind, how do you communicate the benefits of daily disposable silicone hydrogel lenses to a diverse patient base?

DR. HOGAN: We create a patient journey of continual education that starts before they even arrive in the office. We educate them when they make appointments, when they're at the front desk, when they're meeting with the medical assistant and then again when they meet with me. We provide education on daily disposable silicone hydrogels in emails and on social media as well, and our staff are trained with scripts. Most of our staff also wear daily disposable silicone hydrogel lenses, and they talk to patients about their experience. So even if a patient decided not to be refit, they will hear about daily disposable silicone hydrogel for a year while they wait for their next appointment, and often by then they're ready.

DR. PAL: With new wearers I don't have to explain the dif-

Support from Peers*

Eye care professionals are in broad agreement about the ocular health benefits of daily disposable silicone hydrogels.

- 92% say silicone hydrogel daily disposable lenses are the best choice to safeguard their patients' eye health related to contact lens wear.
- 91% say silicone hydrogel daily disposable lenses provide better long-term eye health for their patients than hydrogel daily disposable lenses.
- 90% say silicone hydrogel is the healthiest lens material for their daily disposable patients.
- 86% say silicone hydrogel daily disposable lenses can ensure patients' eye health related to contact lens wear.
- 77% worry that their hydrogel daily disposable lens wearers' corneas aren't getting all the oxygen they require.
- 87% agree that patients who wear silicone hydrogel daily disposable lenses have fewer eye problems/complaints than patients who wear hydrogel daily disposable lenses.

* ECP perception of the benefits of 1 day silicone hydrogels. February 2018. Cello Health Insight. Data on file. Survey carried out online in US, UK and Japan. Total sample size n=300 (100 ECPs in each country).

ferences in modalities in much detail. I just recommend a one day disposable, provide my rationale and fit them in a daily disposable silicone hydrogel lens. The existing hydrogel wearers require a longer conversation about the differences, the benefits and why I recommend a change.

DR. ROTH: No one wants to pay more for the same thing, so you really need to go over your reasons for switching. In many cases, there's already a clinical need, even though the patient can't see it. Baseline photos and automated scans that detect vessels in the conjunctiva and evaluate the degree of hyperemia can be helpful here. After a few months of daily disposable silicone hydrogel wear, I grade it again to reinforce the decision to switch.

DR. PAL: My conversation changes dramatically when I see hypoxia. In such cases, I make a stronger recommendation and no longer provide options. A daily disposable silicone hydrogel is the only option I will permit.

DR. FROGOZO: Practitioner education is important. There is a hesitation in prescribing silicone

hydrogels due to perceived cost. But I have found that if you educate patients, they will invest.

DR. KARPECKI: We all seem to agree that ECPs should try to move the conversation away from cost and instead talk about value and health. But is it possible that we are also, perhaps, misunderstanding patients' attitudes regarding cost?

DR. PAL: I'd say so. Most of our patients didn't attend optometry school. They see us as the experts and expect us to give them our best advice. When you go to the Apple store and you want a new phone, should you be offered the iPhone X or the iPhone 4? It seems obvious we should start with the best and work our way down if needed.

DR. FROGOZO: CooperVision conducted a global study that surveyed 1,500 consumers to better understand their attitudes towards daily disposable silicone hydrogel contact lenses.⁸ Sixty-eight percent of consumers say they expect their ECP to recommend the healthiest option regardless of cost. Three-quarters

of consumers would be likely to follow the advice of their ECP, regardless of cost. And, 78% of consumers agree they want their ECP to recommend the best contact lens.

Moving Forward with Daily Disposable Silicone Hydrogel

DR. KARPECKI: After everything we've discussed, I would conclude that the biggest thing standing in the way of moving patients into the lenses we want them in is ourselves—and that's something we can control. Does anyone else have any parting thoughts?

DR. LAUENBORG: It's important to note that, although we need to listen to the voice of science, we also need to teach it to our patients.

DR. HOGAN: You're exactly right. From an academic standpoint, it's engrained, but I always go back to the science to explain to our patients why we're recommending daily disposable silicone hydrogel lenses.

DR. ROTH: Let's be proactive rather than reactive. And let's try to be enthused about contact lenses. Enthusiasm makes a difference when you're talking to patients.

DR. PARK: In most cases, we're not communicating with novice patients. Patients have access to so much information now, and they will seek it out to substantiate whatever we tell them. That's OK. If patients want to do their own research, let them. There is plenty of information online about the benefits of silicone hydrogels. The danger is in not first exposing your patient to daily disposable silicone hydrogels because they will learn about them somewhere.

DR. PAL: I started wearing daily disposables myself about 10 years ago, and today, 98% of my contact lens patients are fit in daily disposables. Of these, 70% are silicone hydrogel materials. The dropout rates in my practice are very low. I stay on top of my patients' wearing experiences to make sure that we don't run into an issue. If you catch a problem early, it doesn't spiral into dropout.

DR. FROGOZO: Recommend what you believe is truly best for your patients—no matter what it may be or what it costs—every time, all the time. Ninety five percent of our peers say if cost was equivalent, they would choose silicone hydrogel over hydrogel for daily disposable patients.³ If that's what we believe, that's what we should do.

Fast Facts on Torics and Multifocals*

- 75% of ECPs say all toric daily disposable contact lens wearers should be fit with toric silicone hydrogel daily disposable lenses.
- 75% of ECPs say all multifocal daily disposable contact lens wearers should be fit with multifocal silicone hydrogel daily disposable lenses.

* ECP perception of the benefits of 1 day silicone hydrogels. February 2018. Cello Health Insight. Data on file. Survey carried out online in US, UK and Japan. Total sample size n=300 (100 ECPs in each country).

1. Morgan PB, Woods C, Tranoudis I, et al. International contact lens prescribing in 2017. Contact Lens Spectrum. 2018;33:28-33.

2. Industry third-party data

3. ECP perception of the benefits of 1 day silicone hydrogels. February 2018. Cello Health Insight. Data on file. Survey carried out online in US, UK and Japan. Total sample size n=300 (100 ECPs in each country).

4. Jones LW. Doc, I think I'm allergic to these new lenses. Contact Lens Spectrum. May 2018;33:44-46

5. Hall BJ, Jones LW and Dixon B. Silicone allergies and the eye: fact or fiction? Eye & Contact Lens. 2014;40(1):51-7.

6. Dumbleton K, Keir N, Moezzi A, et al. Objective and subjective responses in patients refitted to daily wear silicone hydrogel contact lenses. Optom Vis Sci. 2006;83:758-68.

7. Dumbleton K, Woods CA, Jones LW, et al. The impact of contemporary contact lenses on contact lens discontinuation. Eye and Contact Lens. 2013 Jan;39(1):93-9.

8. Silicone hydrogel lenses. 2018. YouGov Plc. Total sample size was 1520 adults who wear contact lenses. Fieldwork undertaken Mar 26th-Apr 3rd 2018. Survey carried out online.

Fast Facts on 1 Day silicone hydrogel Candidates*

- 87% of ECPs agree that, like patients who wear frequent replacement lenses, daily disposable patients should be in silicone hydrogel material lenses.
- 82% of ECPs agree that silicone hydrogel material should be the standard of care for daily disposable contact lens patients.
- 84% of ECPs agree that if they could, they would like to prescribe all new contact lens wearers with silicone hydrogel daily disposable lenses.
- 87% say silicone hydrogel material should be the first choice of material for daily disposable lenses.

* ECP perception of the benefits of 1 day silicone hydrogels. February 2018. Cello Health Insight. Data on file. Survey carried out online in US, UK and Japan. Total sample size n=300 (100 ECPs in each country).



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