ABB Optical Group

Practice Development Series

Differentiating Your Practice with Specialty Contact Lenses

Presented by Matthew Lampa, OD, FAAO

An interview with Craig W. Norman, FCLSA

Craig Norman
Dr. Lampa, thank you for participating in tonight's webinar.

I have a few questions to ask you to build upon from your presentation.

Here is our first question.

Regarding topography, which maps are best for contact lens fitting?

Dr. Matt Lampa
There's really three.

The first is the axial display, which is best used to give us an understanding of the power of the cornea. Even better said, it tells us how symmetric the patient's cornea is along with helping to predict how the patient's expected to see.

The second is the tangential display, which is best used whenever you're determining the change that may have happened because of the fit of a contact lens For instance, in orthokeratology the tangential display tells us where the position the lens was overnight.
Third, there's the elevation display, which really gives us the best prediction of how or where the corneal contact lens is going to be fitting on the eye.

Craig Norman
To build upon that, do you often use the simulated fluorescein patterns that topography software provides to virtually determine what the lens may appear like on the eye?

Dr. Matt Lampa
I do when, especially when with the elevation display it looks like there might be enough asymmetry that I might struggle getting a corneal contact lens to be successful.

So, what I'll do is choose the corneal contact lens within the typography software that is either identical to the lens or a similar product that I would use out of the diagnostic fitting set. I then evaluate different base curves, diameters, optic zone sizes, and eccentricity combinations in an effort to get the lens that looks best on the eye.

Other times I use the simulated fluorescein pattern is for troubleshooting a contact lens fit. Instead of trying multiple lenses out of the diagnostic set I'll try on a few quickly on the topographer before I see the patient and to speed up my exam time.

Craig Norman
Today, we live in a scleral-centric world regarding the correction of irregular astigmatism. But I noticed

in your presentation that you talked a lot about corneal lenses still having a time and place.

In particular. For keratoconus patients, can you discuss how you make the determination to consider a corneal versus a scleral lens?

Dr. Matt Lampa
My default is to initially fit the patient in a corneal contact lens, or if a patient's already wearing one to do my best to keep them in it as successfully as possible in terms of fit, vision, and comfort.

When I'm not able to successfully use their cornea to support the physical fit of the contact lens, I'll try to support the lens with their sclera, vaulting over the cornea with a scleral design.

Craig Norman
I've heard you mention a technique where you use differences in corneal elevation to help in choosing a corneal vs. scleral design. Can you describe that?

Dr. Matt Lampa
A study we performed at Pacific University was looking at those patients that were able to be successfully fitted in corneal contact lenses versus those that weren't.

We found that individuals that have a 350-micron or less difference along the greatest meridian of change with the topography elevation display have an 88% chance of wearing a corneal contact lens.

Conversely, where there is greater than a 350-micron difference along that greatest meridian of change the patient is better served by fitting them into a scleral contact lens.

Craig Norman
Many ECP's are recommending scleral lenses for all irregular cornea patients. Sometimes I think its overlooked that they are difficult for patients to manage. Many patients would much rather just slip a lens on the tip of their finger, quickly apply it and they're good for all day wear.

Dr. Matt Lampa
Definitely, I think that when a scleral lens patient is at home it's okay, but as soon as they leave their home they have to carry with them the application device, the removal device, the lens case and storage solution.

And then the solution that they would need to use to reapply the contact lens for whatever reason during the day, and to have enough solution that. They make sure that if they didn't get it right on the first try, that they would have the ability to do it again, or if they need to do it in both eyes and they have enough for that. their travel bag quickly gets to be fairly large.

Craig Norman
Let's switch gears a bit. Part of the today's specialty contact lens practice is myopia management. To really differentiate yourself in this area you need to do more than just fit one type or one category of lens.

There appears to be a role for ortho K in myopia management time although we're unsure what percentage of the time it will be indicated. If you want to differentiate yourself as a specialty myopia management practice you need to become an ortho-K expert. More so, I believe you need to be a topography expert more than a lens designer.

Can you talk a little bit about how you use typography for the management of the ortho-K?

Dr. Matt Lampa
I could not agree more.

One's understanding of topography is critical to making the best initial lens design choices, and on follow-up to adjust the physical contact lens fit.

Post-fit topography will tell you centration and optimal treatment, to know that you're correcting the fullest amount of myopia.

Additionally, I think it's useful to know how much elevation change there is in about an eight-millimeter area.

Eight millimeters is the location where most orthokeratology contact lenses land on the eye.

So, if a cornea has greater than about 30 microns of elevation difference in that eight-millimeter zone there's high chance the eye will need a toric ortho-K design. 30 microns is less than half the thickness of a human hair, so this is small difference.

You want an orthokeratology lens to land 360 degrees around the lens regardless of the amount of corneal toricity the patient has. This "locks" that lens in, optimizing the suction forces to correct the patient's myopia and to flatten it optimally.

Craig Norman
There's a lot of discussion today about trying to estimate the amount of elevation differences, strictly based on the amount of corneal astigmatism. Do you think you're better off looking at the elevation differences to determine the appropriate style of lens?

Dr. Matt Lampa
Yes. Corneal astigmatism will occasionally be clustered in the center and not extend across the patient's full cornea.

On the other hand, one might have a low amount of corneal astigmatism yet it's present from limbus to limbus. So, I'm getting a snapshot based purely on just what's happening in the middle of the cornea in terms of corneal toricity which may not be the full picture of what's actually happening where the contact lens lands in both directions.

Craig Norman
In the spirit of differentiating your practice with specialty contact lenses, this is exactly the type of measurement you need to make. Rather than just determining that a patient has 1.50D of astigmatism you're able to follow a specific protocol on when to accurately consider a toric ortho-k design.

Dr. Matt Lampa
Couldn't agree more, because the faster you understand this in terms of your corneal topography, the faster you are going to be successful.

Craig Norman
One last item regarding ortho-k I'd like to have you remark on. The unusual thing about ortho-K is with some of the empirically fit designs today, it's possible you may never see the patient with a lens on their eye.

For all other contact lenses, one spends their whole career behind a slit lamp looking at lens position, movement, torqueing, or fluorescein patterns. Yet with ortho-k, it's possible that you may follow a patient for 10-12 or more years without ever seeing a lens on their eye.

Dr. Matt Lampa
It's amazing that you could argue that where we need to be the most technically accurate is in orthokeratology. Yet, it's the lens that we analyze the least.

Craig Norman
That was well put, Matt. Can you describe where specialty soft lenses fit in for you?

Dr. Matt Lampa
This is such a great way to differentiate yourself in the mind of the patient, but also in terms of referrals to your specialty contact lens practice.

Let me share a quick story here.

I had a patient sent to me by a local ophthalmologist for a scleral lens fitting. The patient was an aphake and had worn corneal contact lenses for almost 50 years. After explaining to her what a scleral lens was she was quite spooked about it and really not interested in wearing them.

So, if I was only specializing in mainly one contact lens design, in this case sclerals, she would have been out of luck.

Instead, I presented other options beginning with a custom soft lens, which she was very thrilled about.

Another option discussed was to piggyback her current corneal GP, which she was equally thrilled by.

I know that's just one example, but I think it does a nice job of demonstrating that if you're attempting to differentiate yourself as specialty contact lens expert, it's in your best interest to diversify the lenses that you have at your disposal, and really understand how to implement them in practice.

In the case of custom soft lenses, I pay attention to the size of the patient's cornea and their refractive error, especially when it comes to astigmatism.

Additionally, there are the presbyopes, where there's a great opportunity to customize a multifocal lens to their eye. Think of how we customize progressive addition spectacle lenses and make very targeted recommendations based on that patient's unique lifestyle, vocation, or avocation. I think terms of custom soft lenses for the presbyope in the same manner.

Craig Norman
If you want to build a specialty contact lens practice, it means that the patients you're seeing have probably already had experiences with contact lenses.

It's important that the patients are aware that you may not have the magic answer for them either.

Dr. Matt Lampa
I agree – this is a tall order.

To be honest, I try not to think about it. You just want to try so hard to get that patient to be successful because the reward is so great for them.

It's such a wonderful thing to be able to get that patient from either being unsuccessful or unhappy with the comfort of their contact lens to potentially solving both of those things in a matter of a visit or two or three. Now what a cool opportunity!

Craig Norman
Where does anterior segment OCT fit in for you in the specialty lens practice?

Dr. Matt Lampa
For me, the greatest utility of anterior segment OCT is in scleral lenses. It provides us with some clues in the initial fit determination. Where it shines is knowing what's actually happening underneath these contact lenses after they've settled on the eye. That may be at one week, one month, or even a year or two down the line.

I think it's just a awesome tool at this point, really unrivaled in the management of the scleral contact lens patient.

Craig Norman
What about custom tints such as opaque and artificial iris lenses. Where did they fit into your practice?

Dr. Matt Lampa
I am convinced that just about every optometrist in the United States has experienced the need for tinted soft contact lenses for cosmetic or medical situations. It's the area I get questioned about the most by graduates.

We certainly see quite a few of them and they can make a huge impact on a patient's life.

One is for iris disfigurement, where you're attempting to make a cosmetic difference. Then there are patients that just seem to be light sensitive whether they have suffered some traumatic brain injury or have a certain type of headache. I know of several stories that have been very life-transforming for patients that have been unemployed that after

using these lenses have been able to leave their homes and seek employment.

Craig Norman
Thank you Dr. Lampa for sharing your expertise and insights.