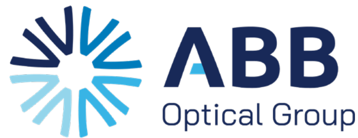


Practice Development Series

Getting Started with Scleral Lens Fitting

Presented by Nettie Hines, OD

An interview with Craig W. Norman, FCLSA

Craig Norman
Dr. Nettie Hines, thanks for answering a few additional questions pertaining to your February 19, 2020 Practice Development Educational Series webinar sponsored by ABB Optical.

Here's our first question.

"Do you need to have an OCT to fit scleral lenses?"

Dr. Nettie Hines
It's definitely not necessary, although it's very helpful I found it helpful. You can fit these lenses with a slit lamp and a phoropter, but you don't have to invest in all of the new technology when starting out. You do need a topography if you're fitting irregular corneas just to monitor the progression of the disease though.

Craig Norman
Do you agree that in most practices today either having an OCT or access to OCT, in particular anterior segment, in itself can be helpful along with slit lamp examination?

Dr. Nettie Hines
Definitely. For instance, I like to evaluate the relationship of the scleral lens to the ocular surface in different meridians. Especially with corneal graft patients, I like to look all around the graft post interface. It really helps for troubleshooting.

Craig Norman
So, the OCT system that you use, is it one that allows you to be able to see the whole lens on the eye from edge to edge or do you have to focus separately on the center and then look out towards the edge and do separate scans in that area?

Dr. Nettie Hines
The OCT I have right now doesn't show an edge to edge image, but it does do a circular pattern which gives me a great deal of information.

Craig Norman
With OCT is as you become more experienced looking at the images you become comfortable analyzing the clarity of the tear film beneath a scleral lens. You're not guessing how much debris is being trapped underneath the lens and whether there's tear exchange, which can be much more difficult to do with slit lamp.

Dr. Nettie Hines
I agree and use the images as a tool to educate patients. So, you can say, "There's some fogging going on. We're going to do our best to minimize it, but you may have to remove and reinsert your lens during the day." I really like that with OCT I can explain "This is your cornea. This is the lens and then this is the fluid layer in between."

Dr. Nettie Hines
I believe it's important to become skilled at explaining things to patients, and that's where I show use OCT images. Although I've heard some lecturers say it's not necessary to communicate these images to patients, but I think you should show off this sophisticated instrumentation. It really helps educate patients. They can visualize what you're looking at and it helps them to understand the importance of monitoring. I always do a presentation for fundus photography as well. It completes the exam and makes patients build trust in you.

Craig Norman
Early on in my career I thought I was pretty good communicating with patients. One day I went to get my car fixed and asked the mechanics "Well what's going on here?" The mechanic brought out a spiral bound presentation kit and he tells me, "Well here's the engine. Here's the part of the engine where the problem is. Here's what's going wrong and here's what we need to replace.

I walked away from there thinking that was great to hear about my car, but I need to do a better job of doing exactly that with patients. I think from what you're saying, it's true that when patients can relate to what you're telling them, then when walking out of the office, they can answer the questions when their family members and friends are asking. They can then explain their ocular situation much better to others.

Dr. Nettie Hines
That's correct. It's your patient's health. They may have to be advocates for their own health because who else is going to be an advocate. One thing that I love is posters by EyeScribbles done by a recent optometry graduate. https://www.etsy.com/shop/EyeScribbles.

Often in offices there are these clinical posters with every structure named like lamina crevice and all this stuff. Patients don't need to know that. Having the basic structures and being able to point things out really helps them understand their condition, and it helps with education and it helps them feel more comfortable with you.

Craig Norman
I totally believe that you have those communication skills just from our discussing things over the last few weeks. Really that's fantastic.

Next question. "What helped you decide to differentiate your practice in specialty contact lenses. What did you do first?"

Dr. Nettie Hines:
Well, first of all I followed around one of the UAB professors, Dr. John Laurent like a puppy dog my entire fourth year of optometry school.

Initially, I was planning to focus on functional vision therapy, but then I had this case where an eight old girl was hit by a Roman candle and was missing some adnexa along with a cornea transplant, she was about to reject. The cornea surgeon said, "Can you help? There's nothing more I can do." We fit her with a scleral lens, and I watched her graft clear up and get healthy and it was amazing. It's kind of like a holistic way of healing. Without doing multiple surgical interventions, you can heal the eye just by putting it in the correct environment.

Craig Norman
That's interesting. I've had opportunities to discuss and interview lots of people regarding their career, regarding what was their Nirvana moment. It usually is a case like that that where you say to yourself, "Wow, I'd like to be involved in changing a few lives in that way."

Dr. Nettie Hines
Definitely. I majored in physics as an undergraduate and my professor said, "Well, what area of physics do you want to study?" I said, "Optics." He said, "That's already been figured out in the physical scene." But to me it's just fascinating and there are always more advancements coming. There's a bright future for optics and optimizing patients' vision.

Craig Norman
Did you go through a residency program to do develop the skills that you have and to gain the confidence you to make the decision to differentiate your practice with specialty lenses?

Dr. Nettie Hines
I did not go through residency. I was recruited by a corneal surgeon who was doing cross-linking and needed someone to fit contact lenses post-surgery for those who needed them.

I think being proactive, along with a lifelong learner, and really getting involved and researching things outside of work is super important – which took me along the path of scleral lenses.

Craig Norman
When one is in optometry school, you're totally focused on one thing which is getting that sheepskin while passing the boards. That's your whole life, but then you wake up the next day and go, "Well, wait a minute. Now I have a life, a lifelong learning journey in front of me because what I was really taught was how to pass those boards, which is the job of the optometry schools.

Dr. Nettie Hines
That's important. What really matters are our patients, which one will become very involved with.

I learn about their life and I want to be successful for them. I tell them, "I'll be as patient with you as you are with me." It may take a while, but I'm not going to give up. Deciding to approach patient care in this manner gave me the confidence is to not give up and to continue despite roadblocks.

Craig Norman
I understand. For me, I focused on specialty contact lenses my whole career. Over time, I would often share a similar sentiment by telling patients that my job is either to successfully solve your problems through the fitting of this contact lens, or to prove to both of us it can't happen.

Dr. Nettie Hines
That is a wonderful saying. I'm going to borrow that.

Craig Norman
Please do, it's all yours. I'm telling you this because you already are trying to communicate that kind of message. The importance for me was I never wanted, if at all possible, I didn't really want the patient to walk away and say, "That guy couldn't do this for me." I wanted instead to have them say, "That guy did everything possible and it can't work for me."

Dr. Nettie Hines
I had a patient today with optic atrophy. The patient ended up wanting a hug and left crying with the optic atrophy. I mean, he still wasn't able to read at 20/400. But just because the visual acuity isn't that much better, it doesn't mean it can't make their lives a little bit better. The real world is different. Sometimes just a little bit of improvement makes a world of a difference, or just caring makes a world of a difference.

Craig Norman
For sure. If you're 20/50, you're irritated because you want to be 20/20. If your hand motion or something like that and now you can see 20/400, you've changed their life. So, the numbers are not as important as what the impact is.

Dr. Nettie Hines
That's correct. Also just showing that you care. One of the reasons I wanted to become an optometrist is I like talking to people and learning about them and really trying to make a difference in their lives, which we're able to do on a day to day basis especially with scleral lenses.

Craig Norman
I had a mentor as a young person who told me, "Craig, there's the Ts of patient care." He said the first one is to touch the patients. Now, I know that sounds weird, but basically is shake their hand and welcome them into the exam room and make sure they feel comfortable. The second key was to teach them something about their condition, and you and I just talked about that, - communication. The third was to tell the patient exactly what you thought they needed. I've never forgotten that that because the

patient is ultimately coming to you for your expertise.

You may have already experienced the situation where you've discussed a situation patient and you've said, "Well, what do you think?" followed by the patient responding "It's not what I think. What do you think?"

Dr. Nettie Hines
I run into that all the time, especially with soft multifocals. Patients want to tell me exactly what they want and what they had been in previously.

I tell patients that just because you had one bad experience doesn't mean you're forever doomed with this modality because there are always improvements in technology. Plus, we will take the time to try different things to really try to get it right. I very rarely have contact lens dropout.

Craig Norman
For sure in presbyopic soft lenses, depending on the design and the individual patient's visual system, their line of sight and angle kappa, one lens brand may never work where another one can.

Dr. Nettie Hines
So, I always tell them not to give up. We'll work through it and find the right fit for you.

Craig Norman
Nettie, that's great. That actually feeds into what I wanted to ask next. Do you routinely present presbyopic designs in sclerals? When I ask that question, please respond in two ways, for those with irregular cornea and for those with normal refractive error, maybe suffering from dry eye.

Dr. Nettie Hines
First talking about irregular corneas. It's important to realize the higher aberrations that the patients have results in some sense of multifocality. Their depth of focus is a lot better, so we need to be proactive in telling them, "Hey, you're probably going to need readers." But I do often present that option to most patients. It depends on how well they're seeing honestly. If they have severe scarring and they're really only about 20/30, then I won't present it. Or I'll tell them the option, let's say, "Readers might be a better choice." But patients who are getting 20/20, I mean why not, let's try it.

Craig Norman
I would agree. As a clinician, if you're trying to help somebody who is post-trauma, post-surgical, keratoconus or another severe condition their presbyopia may be the last thing you're thinking about.

Dr. Nettie Hines
I had a patient this week who's seeing 20/80 in her glasses, 20/20 in her scleral lenses.

I warned her, "Hey, you're going to need readers." I warned her or told her she might want to get a pair of progressive lenses that she could wear over her contacts. She hasn't been wearing her contacts because she can't see up close. You'd think if your visual improvement is so much better that it would be okay, but it's important to these patients that they see at all distances.

Craig Norman
How often do you use toric peripheries and how do you go about that decision-making process?

Dr. Nettie Hines
I really think that about 90% is a realistic number. When I first started, I wasn't fitting that many toric peripheral curves, but with all the research coming out with corneal scleral profilometry, we're really realizing that the sclera is asymmetrical. Even a small amount of toric peripheral curves can make a difference in the comfort of the lenses, but also the stability. If you have the lens moving around, maybe it needs a toric peripheral curve to help it grab into the correct location, locking it into place.

Craig Norman
One of the areas that people get confused is when they try to relate corneal toricity to scleral toricity because they aren't necessarily directly related. It may not even be in the same position.

Dr. Nettie Hines
For sure. I noticed after cross linking, the sclera can become more toric.

That's when I really started using toric peripheral curves more often. Then I realized that it was helpful in other patients, not just keratoconus post cross linking. If a patient is feeling the lens a little bit, it's probably some slight edge standoff. They can usually point to exactly where it is. Edge standoff is hard to see, so a lot of it is asking the patients and sometimes referencing the anterior segment OCT.

Craig Norman
Its true that edge standoff is difficult to see unless it's dramatic and usually the patient can't wear that lens anyway due to discomfort. By using slit lamp techniques that bounce light and get some shadow that will help you view more subtle edge standoff.

Now as far as surfaces, do you routinely order scleral lenses with plasma and how often do you go one step further and use HydraPEG?

Dr. Nettie Hines
My understanding is that the plasma is just a good deep cleaning before they send the lens out. I don't think I'd order a lens without plasma honestly. Also, I dislike it when a lens is delivered dry because then it's going to be dry for the patient.

As far as HydraPEG, when they first were coming out, there were rumors that you could send it back and get it recoated. One thing I've noticed is you must be careful, very careful, with abrasive surfaces, even your fingers. I will say that patients love it. Their comfort is a lot better. It's amazing that we have that option. For my patients that have concurrent ocular surface disease, I pretty much always order it.

Craig Norman
To your point let may add a little a little history. Hydra-PEG's parent company is only five or so years. As a startup company they were developing their product and learning how to market it at that same time. So, to your point where they said you could send it in or not send it in or you needed solutions or didn't need solutions, they just didn't know yet.

Dr. Nettie Hines
Oh yeah, I'm not blaming them at all. And with all the new products they have coming out, it sounds like that we now have a way to make it last longer.

Craig Norman
From a financial point of view, do you have patients sign some kind of agreement or contract prior to fitting?

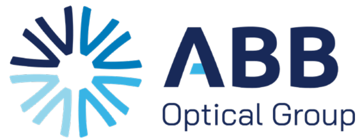
Dr. Nettie Hines
Ideally yes, but I'll be honest, we're still working on all of our process and protocols. We want patients to sign an agreement but in some cases we just have a verbal discussion or an agreement. We do all of our paperwork on laminated sheets with dry erase marker to try to save the planet. So, I'd like to add that.

Craig Norman
Okay. For instance, if a parent brings their child to the orthodontist, they're signing off on papers regarding their financial obligations. In contact lenses, maybe for minus three diopter spheres one doesn't worry about that, but for bigger ticket items the question always comes up.

Dr. Nettie Hines
I agree. You have to tell the patient what to expect, otherwise they're not going to be happy.

Craig Norman
I know what I just said, but for most of my career, it was based on a handshake. If you live in a smaller community and you are building a clientele, there's a lot of things that do that don't necessitate a written agreement. Whereas if you live in the downtown area of a major city, it's probably absolutely necessary.

Dr. Nettie Hines
I cannot agree more. Where I worked at my first job, they required signing off on everything. AZ lot of those patients followed me here, are very loyal to me and it's based on the trust. You can tell what to



expect with that, but I will say an important thing is that some of these patients don't know if it's going to help them or not. It's hard to commit to paying that much money when you don't know a benefit. Sometimes I'll try lenses on the eye and show the patients.

Craig Norman
So your point is, of course, that these agreements are helpful but you don't need them 100% of the time depending on the situation.

You mentioned this in the webinar – when patients are in a situation where it doesn't work, they're concerned about what happens. So, somehow addressing that I think is important.

Dr. Nettie Hines
I really believe that. I believe a lot of us really undercharge for our services and you got to be careful about that. We spend a lot of time learning this and we deserve to be compensated for our expertise. If the patients want the best, then they should expect to pay more. I mean, you get what you pay for basically.

Craig Norman
Yeah. Eyecare as a whole, and in particular the optometric part of eye care is difficult because one is providing professional services and optical goods at the same time. If you had a practice that did not supply optical goods, you just bill your time and your effort and that's that. It's kind of different when you're selling products at the same time.

Dr. Nettie Hines
But also a lot of my patients are friends, family friends. I mean, I decided I cannot give all my cousins discount because I've got too many cousins and starting out, that's who comes to you. It's your friends, your family friends, things like that. So, just being aware of that. We still have to pay our light bill and everything, although money is not my strong suit.

Craig Norman
Well, here's the thing that they don't train you for that in optometry school. You might learn about practice management and you might belong to a practice management club, but it's still a little different when you're still on the stool and they're in the chair and you're telling the patient that it's X hundred or thousands of dollars. So, your comment tonight about the financial coordinator, which divorces that from you to that person, is exactly the way to go even if there's only a two-person practice.

Dr. Nettie Hines
We have to have advocates because we went into medicine, or I would say the majority of people, because we care not because of the money. So, having someone else to allow you to separate yourself. I mean you don't want to find yourself recommending a lower quality product just because you may be assuming something about the patient finances. I've had patients that say, "I've got to save up but I'll be back," and they come back.

But I'm learning more and more, you provided a service and you need to be paid for that.

Craig Norman
Yeah. Another way to go about it is to consider that X amount of dollars each year I'm willing to donate of my time for charitable cases.

Dr. Nettie Hines
Exactly and we've thought about that. One other thing our financial coordinator presents to patients is to think about the cost of sclerals versus cost of say a Biofinity Toric XR. The sticker shock in the beginning is like wow, but you end up coming out better in the long run in my opinion.

Craig Norman
All lenses tend to fit differently. So, what is your strategy to determining which lens product, not necessarily by brand but by design you choose for a particular patient?

Dr. Nettie Hines
Are you talking about like lens geometry?

Craig Norman
This is a fitting question but there are other economic questions related to warranty cancellation and other factors - not just the fitting part.

Dr. Nettie Hines
That's why you need to schedule a big chunk of time at the initial fitting. You don't know whether you're going try one lens and it's going to be the perfect or not landing properly or just not following the periphery of the eye. Then I consider another design.

It's amazing to me the vision patients can get when you change a lens. Sometimes their vision would be 20/60 and then I just change brands and they're like 20/30. It's kind of unbelievable to me, to be honest. You just must take the time to try all different lenses and to be willing to take the time to do it.

Craig Norman
At the Michigan College of Optometry, we studied this a lot.

The differences from one brand to another was how these scleral lenses tilted on the eye. When they tilted, there was a prismatic effect of the tear layer underneath that affected the vision.

Dr. Nettie Hines
Exactly. I notice that all the time. Yes, you want to get the tear layer as uniform as possible. I know it can't always be perfect, but there will be a lot of times where you'll get a prismatic effect.

Craig Norman
That's one of those unusual early discoveries with scleral lenses that was not predictable in advancement.

Do you have any closing comments?

Dr. Nettie Hines
Yes, one thing I found very helpful was keeping a document whenever I'd learned something. I had different issues that would arise and then I'd talk to the consultants and they'd recommend this or that and I'd write it down. The important thing is to critically evaluate your successes and failures. We're not always going to be right every time, but if you learn from it, then it was worthwhile.

Craig Norman
Yeah. It's like a little diary of what has happened and I totally agree. I think the best thing somebody can do is when you're going to start fitting any new category of lens, but we'll talk about sclerals for right now, that your first five cases or 10 cases, write down everything that happened so that you can look back and go, "Okay. I'm not going to make that mistake again."

Craig Norman
Thank you, Dr. Nettie Hines. Your recent webinar was terrific and this Q&A session extremely interesting as well.