

Multifocals: The New Standard of Care

Part 1 of 2



Highlights from a roundtable held Saturday, March 3rd during SECO 2012

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M O D E R A T O R



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Multifocals: The New Standard of Care

Outperforming monovision in vision and long-term success, multifocal lenses should be the first choice for practitioners.

Dr. Schachet: With the last of the Baby Boomer generation now well into their 40s, presbyopia is prevalent in our patient populations. Although the onset of this age-related problem depends on such factors as refractive errors, lifestyle, genetics and geographic location, virtually every person over age 40 experiences some degree of presbyopia. Most have lost varying degrees of their accommodation capability by age 50.

By 2018, Baby Boomers will help boost presbyopes to the single largest group of potential contact lens wearers at a projected 28%.¹ However, historically, contact lens usage has dropped off around age 45,² when the onset of presbyopia makes multifocal lenses necessary, but the trend is poised to change with better multifocal contact lens technologies, easier fits and greater patient acceptance and success. As practitioners, this gives us a huge opportunity to satisfy an unmet need in a way that not only makes patients happier, but also increases profits and practice growth.

But how do practitioners view monovision and multifocal contact lenses? What are the advantages and disadvantages? Are multifocal lenses the new standard of care, and if so, why are so many patients still in monovision?

MULTIFOCAL ADVANTAGES

Dr. Schachet: What are the advantages of multifocals over monovision?

Dr. Schaeffer: Multifocal lenses provide natural vision at distance, mid-distance and near. Monovision has been a little bit better at near in low contrast,¹ but then there's a problem with distance and mid-distance because the patient is over-plused for near. Multifocals replicate normal vision, while monovision is an adaptation to a less-than-adequate seeing arrangement.

Dr. Lowinger: Obviously, multifocal lenses may not be super-crisp in low illumination, but they give patients the full range of vision. Another advantage is avoiding the long-term effect monovision has on the eye. Additional anisometropia between the eyes may develop, and then you're driving the patient's refractive error by changing their contact lenses.

Dr. Kading: Anisometropia changes things unnaturally. Do we want to preserve the natural binocularity that we can? Do we want to preserve the patient's prescriptions and follow them all the way through? Or do we want to create an unnatural situation where we've got one short arm and one long arm?

Dr. Sindt: When you say to a patient, "We have two choices: Both eyes with full-range vision as your eyes naturally work or one eye seeing distant and one seeing near," they actually back up and say, "Why would I want that second choice?" Plus, we have to think about how the choice will affect the patient down the road, like when it's time to choose implants for cataract surgery.

Dr. Schaeffer: In the past, when only a few multifocal lenses were available, we didn't have much choice. But now we have a choice, and that choice is pretty obvious. I always want to obtain binocularity for the patient whenever possible.



Patients don't seem to have a problem paying extra money to get eyeglasses without an unsightly line, even though their insurance doesn't cover the extra cost. Some practitioners seem to be reticent about recommending that patients do the same thing for multifocal contact lenses. But if we can suggest that patients pay a premium to avoid a line on their glasses, no one should be worried about having patients pay a premium to get a contact lens system that does everything for them.

— John L. Schachet, OD

Furthermore, we require all patients in monovision to sign a legal release stating that we have instructed them to wear glasses over their contact lenses while driving, especially at night. Ten years ago, pilots were forbidden to wear monovision lenses because a pilot missed the runway. It's old news, but it still it points to the same question: Are we going to give our patients the best possible vision?

COMFORTABLE, CONSISTENT MATERIALS

Dr. Schachet: Because presbyopia sets in when patients are in their 40s, dryness can become more of an issue. Does that affect your choice between monovision and multifocals?



With the introduction of any new technology, there are the early adopters, the mid-adopters, and finally a state of critical mass where the technology is really expected. I think we've reached critical mass with multifocal lenses. They're considered the standard of care within the industry.

— Christine Sindt, OD

Dr. Sindt: I choose the material and lens care solution that are appropriate for the eyes, and there are many great options on the market today. I partner with each patient to find the best lens for his lifestyle — optics, material and solution drive the choice.

Dr. Kading: I agree. This decision is no longer influenced by dryness concerns now that all of the multifocal designs are in the newest silicone hydrogel materials with monthly and 2-week modalities. We really can shift all of our patients directly into multifocal lenses.

Dr. Schaeffer: For patients with contact lens-related dryness, I think that having the clearest near, mid and distance vision encourages a normal blink pattern. When you change the way a person's vision has worked for the past 40-plus years with monovision, you change the way the body operates. I think, in the case of monovision, it could change the blink pattern. In our practice, I think choosing a multifocal for more natural vision may help emerging presbyopes who suffer from contact lens-related dryness.

Dr. Sindt: We also have many emerging presbyopes who are existing contact lens wearers. We're starting to fit the Gen-Xers who have been wearing soft contact lenses for 20 or 25 years. Even most Baby Boomers, who have past experience with other types of lenses, were moved into silicone hydrogel lenses 10 years ago.

Dr. Lowinger: Some multifocals are definitely better than others, but the good news is that all the materials have good oxygen transmissibility. It's an easy conversation compared to 10 years ago because although we're making a change, the change is going to work out great for the patient.

LINGERING ATTACHMENT TO MONOVISION

Dr. Schacht: A number of studies have shown that approxi-

mately seven out of 10 patients prefer multifocals over monovision in practical activities and real-world settings.^{3,5} So, why are practitioners still making monovision the most common form of contact lens correction for presbyopia?

Dr. Schaeffer: Some doctors don't feel confident or comfortable in their ability to fit multifocal lenses quickly and accurately. They may not have the necessary technicians or staff to keep multifocal patients moving through their exams smoothly and efficiently. And, of course, the monovision has worked for them for years. Some still believe, "If it ain't broke, don't fix it." But they're not giving their patients the best care.

Dr. Kading: People stick with what they know, and they aren't always willing to invest the time to learn something new. I think that a fair number of practitioners who are still fitting monovision perceive that it would be time-consuming to learn to fit multifocal lenses. Monovision is not difficult to fit for emerging presbyopes in their early 40s; it becomes problematic and visually bothersome to patients later on in life.

Dr. Lowinger: That's right. If a patient in her early forties is a -5.75 and she's starting to have reading problems, we can put her in one 5.50 or 5.25 lens. She'll pick up a little reading vision right now. It's easy, and it really doesn't affect her distance vision all that much. But in each successive visit, we're dialing it back. Before we know it, she has a 1.0 or 1.5 diopter difference between the eyes. By saying, "If I just under-correct a little bit, she'll be fine for a few years," we've positioned her for a much more difficult transition to multifocal lenses down the road.



I think a fair number of practitioners who are still fitting monovision perceive that it would be time-consuming to learn to fit multifocal lenses. Monovision is not difficult to fit for emerging presbyopes in their early 40s; it becomes problematic and visually bothersome to patients later on in life.

— Dave Kading, OD

Dr. Sindt: Once the patient is up to that 1.5-diopter difference between the two eyes, she's losing intermediate vision. If you start her in the multifocal lenses, she never loses intermediate vision.

Dr. Schaeffer: Another important issue is price. Monovision fees are usually much lower than fees to fit multifocal lenses — as they should be. Some practitioners don't want to explain a

higher fee to patients. To fit multifocal lenses, you need additional time. You're not just replacing a lens, you're replacing a system, and that has to be built into your fee. When you and your staff discuss what's covered by insurance and what patients will pay out of pocket, you'll get into that patient conflict of "I want what's least expensive today." Some practitioners aren't comfortable having that discussion.

Dr. Schachet: I compare it to progressive lenses. Patients don't seem to have a problem paying extra money to get eye-glasses without an unsightly line, even though their insurance doesn't cover the extra cost. Some practitioners seem to be reticent about recommending that patients do the same thing for multifocal contact lenses. But if we can suggest that patients pay a premium to avoid a line on their glasses, no one should be worried about having patients pay a premium to get a contact lens system that does everything for them.

MULTIFOCALS: THE NEW STANDARD OF CARE

Dr. Schachet: In this room, it sounds like we're in agreement that monovision probably should be a thing of the past?

Dr. Sindt: Monovision isn't completely off the table, but it's not my first line. For a normal patient with regular optics, multifocal lenses are my first line. Monovision is in my tool box, and I have a solid understanding of what it can and cannot do, but it's an exception that I use only for specific patients.

Dr. Lowinger: I don't take monovision off the table, either, but to me it's the last resort when everything else I've tried has gone nowhere because the patient just isn't adapting. I use it grudgingly because I know I'm not giving the patient the optimal choice.

Dr. Schaeffer: Multifocal lenses change people's lives. Monovision is dead. Why fit monovision? To put a 50-year-old patient who's starting to have crystalline lens changes into monovision and let him drive at night? That's ridiculous in the 21st century.

Dr. Schachet: So multifocals are the new standard?

Dr. Sindt: With the introduction of any new technology, there are the early adopters, the mid-adopters, and finally a state of critical mass where the technology is really expected. I think we've reached critical mass with multifocal lenses. They're considered the standard of care within the industry.

Patients are expecting them, too. It doesn't involve a long conversation anymore. We say, "You're 43. You're having some near problems. Let's put you in a multifocal." And that's the whole conversation because patients just get it. It gives them greater respect for our practices, and they respond to the fact that we're confident in and comfortable with multifocal lenses as well.

Dr. Kading: We recommend multifocal lenses in an assumptive way. "This is how we do things in our office. We don't fit



Another drawback with monovision is the safety issue. The majority of monovision lenses are fit without driving glasses. We're taking vision away, and then sending people onto our streets and highways. I can't think of another medical example of that kind of induced public risk.

— Jack Schaeffer, OD

monovision because it's not the right way to go. We prescribe lenses that are healthier and better for your vision." Over time, patients go with that philosophy in our practice and realize that more expensive generally means more valuable. With a good explanation of the values and benefits of multifocal lenses, even the toughest patients generally see the value in multifocals and stop focusing solely on the price tag.

Dr. Schaeffer: Because multifocals are the new standard of care, emerging presbyopes are starting young. If a patient wants monovision, we explain that it changes the visual system. Patients understand that it's going to change the way they see, and as their vision changes over time, we may have to reverse that change. If we start with multifocal lenses, we're keeping patients in the realm of high quality care. That's the place we assume they want to be. And when they start there, multifocal lenses are an easy change with an excellent success rate.

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By John Schachet, OD

Evidence for a Better Choice

A clinical roundup of multifocal contact lens research supports multifocals over monovision.

Despite the many excellent multifocal contact lens options available to practitioners today, many still fit presbyopes with monovision. In this roundup of studies on multifocal lenses and monovision, you'll see the clinical repercussions of this choice and the real-world difference it makes for patients.

MONOVISION CAUSES ANISOMETROPIA

Researchers at the University of Houston College of Optometry found that induced ametropia in primate subjects created by blurring one eye "may cause a difference to develop between each eye's correction (anisometropia) when none existed before wearing the correction."¹

The researchers evaluated vision before monovision contact lens correction and after at least 12 months in the lenses, and compared the results from 62 subjects to control groups wearing spectacles and binocular contact lenses. Monovision wearers had significantly more anisometropia than those in the spectacles ($p = 0.043$) or the group wearing like-powered contact lenses ($p = 0.025$). Some 29% of monovision subjects had anisometropia changes at or above 0.50 D, with some as high as 1.25 D.

PATIENTS PREFER MULTIFOCAL LENSES TO MONOVISION

Researchers at the Ohio State University College of Optometry in Columbus compared visual performance and patient satisfaction among patients with no previous presbyopia correction wearing multifocal lenses and monovision.²

Thirty-eight presbyopic patients were randomized to multifocals (Bausch + Lomb SofLens Multifocal) or monovision (SofLens 59). After 1 month, researchers measured near stereoacuity and high- and low-contrast visual acuity at distance and near. The patient satisfaction test was the National Eye Institute Refractive Error Quality of Life Instrument (NEI-RQL).

Next, researchers fit each patient with the modality that they

had not worn the preceding month and had them return a month later for the same testing. Finally, they asked patients to report which lens they preferred.

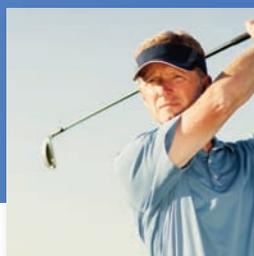
Testing showed that patients with both modalities had at least 20/20 distance and near binocular vision in high-contrast conditions. Under low contrast conditions, patients with both modalities lost less than a line of best-spectacle-corrected vision at near, but multifocal wearers lost five to six letters, and monovision wearers lost two letters. In terms of lens preference, 76% of patients preferred multifocal contact lenses, while 24% preferred monovision.

In another single-masked study comparing multifocal lenses to monovision, with both made of omafilcon A, researchers at the Clinical Eye Research Facility at the University of Alabama at Birmingham, School of Optometry, randomized 46 patients to the two modalities.³ Subjects were a mixture of previous, current and new contact lens wearers. They wore one lens modality for 1 month and then switched to the other modality for the second month.

When asked which modality they preferred, 14 of the 46 patients chose monovision, while 32 chose multifocals. Just two of the six subjects who had previously been successful in monovision preferred that modality, and two of six previous multifocal wearers preferred monovision. Numbers for all of the subjective assessments followed these preferences. Interestingly, results of visual function tests did not correlate to patient preferences.

PRACTITIONERS ACHIEVE SUCCESS WITH MULTIFOCAL FITTINGS

A pre-market evaluation of Air Optix Aqua Multifocal contact lenses (Alcon) showed that practitioners were pleased with the lenses and comfortable fitting them.⁴ Alcon mailed complimentary trial sets to 350 doctors along with the fitting guidelines and asked the practitioners to report their experiences in fitting 10 patients. The result was a report on 2,455 patients.



Here's the percentage of practitioners who agreed to the following statements:

- 95.5% agreed the lenses are easy to fit
- 81.5% agreed they had an easier time fitting these lenses compared to other multifocal soft contact lenses
- 65.6% agreed they had an easier time fitting these lenses compared to monovision
- 79.7% agreed that the success rate for these lenses is higher than that for other multifocal soft contacts

Practitioners' overall success rate was 76%. While 70.6% said they fit most patients on the first try, fitting averaged 2.4 patient visits and fewer than four lenses.

MULTIFOCALS BEST FOR EMERGING PRESBYOPES

Researchers at the Centre for Contact Lens Research, School of Optometry, University of Waterloo in Waterloo, Ontario, Canada compared the performance of four different soft lens correction options on existing soft contact wearers who were exhibiting early signs of presbyopia.⁵ This prospective, double-masked, randomized dispensing trial put all patients in all four modalities for 1 week apiece. The alternatives, all made from Lotrafilcon B material, were: Air Optix Aqua Multifocal lenses, monovision, habitual correction and optimized distance visual correction.

Vision testing included both LogMAR and "real-world" vision tests. Most vision tests showed no difference. However, in low-contrast near-vision LogMAR with low lighting, acuity with monovision was better than multifocal or habitual correction. "Real-world" subjective ratings showed that participants found Air Optix Aqua Multifocal lenses performed better than mono-vision, especially for driving. Subjects preferred Air Optix Aqua Multifocal lenses for daytime and nighttime driving, and they had less glare or haloes and saw road signs better. They also liked Air Optix Aqua Multifocal lenses better than monovision for watching TV, using a computer and refocusing from distance to near. In 15 out of the 15 real-world vision tests, patients preferred Air Optix Aqua Multifocal contact lenses over monovision.

LENS MATERIALS MATTER

Alcon performed a study comparing multifocal contact lenses made of lotrafilcon B (Air Optix Aqua Multifocal Lenses)

versus balafilcon A (PureVision Multi-Focal, Bausch + Lomb).⁶ Researchers evaluated visual acuity, as well as subjective factors such as comfort, visual satisfaction, intent to purchase the lenses and lens preference. Half of the patients were randomized to each lens material, and all were advised to use the same lens care regimen.

Subjects wore the lenses for up to 8 days. They gave Air Optix Aqua Multifocal lenses higher ratings for comfort at every stage of wear, from initial dispensing to end-of-day to their follow-up visit. Asked if they would purchase their lenses if their doctor offered the option, subjects answered quite differently for the two lens materials. Among Air Optix Aqua Multifocal wearers, 58% definitely or probably would buy the lenses, 30% might, and 2% definitely would not buy them. In contrast, 21% of PureVision Multifocal wearers definitely or probably would buy the lenses, 36% might, and 34% definitely would not purchase them.

MULTIFOCALS SURPASS MONOVISION

These studies reinforce the prevailing wisdom: Better vision, patient experience and long-term results have led multifocal contact lenses to replace monovision as the standard of care for patients with presbyopia. Patients prefer multifocals to monovision by dramatic margins, and emerging presbyopes say they see better with multifocals. From the practitioner's perspective, we can add the elimination of anisometropia into multifocals' plus column, and we enjoy the ease of fitting new multifocals. To give patients the best care, multifocals are the first line of correction for presbyopes.

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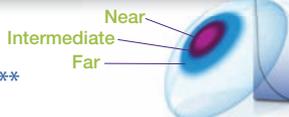
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