

Glaucoma and Macular Degeneration: Can You Be Diagnosed With Both? February 12, 2025 1:00 PM EDT Transcript of teleconference with Dr. Dilru Amarasekera, Glaucoma Specialist, Wills Eye Hospital, Thomas Jefferson University

The information provided in this transcription is a public service of BrightFocus Foundation and is not intended to constitute medical advice. Please consult your physician for personalized medical, dietary, and/or exercise advice. Any medications or supplements should be taken only under medical supervision. BrightFocus Foundation does not endorse any medical products or therapies.

Please note: This Chat has been edited for clarity and brevity.

MS. SARAH DISANDRO: Hello, and welcome to today's Glaucoma Chat, "Glaucoma and Macular Degeneration: Can You Be Diagnosed with Both?" My name is Sarah DiSandro, and on behalf of BrightFocus Foundation, I'm pleased to be here with you today as we talk about two diseases that can both lead to vision loss and irreversible blindness.

Our Glaucoma Chats are a monthly program in partnership with the American Glaucoma Society designed to provide people living with glaucoma and the family and friends who support them with information straight from the experts. All Glaucoma Chats presented by BrightFocus Foundation are also available to listen to as podcasts on the go on YouTube, Spotify, iHeartRadio, Amazon Music, Apple Podcasts, and Pandora.



BrightFocus Foundation's National Glaucoma Research Program is one of the world's leading nonprofit funders of glaucoma research and has supported nearly \$51 million in scientific grants exploring the root causes, prevention strategies, and treatments to end this sight-stealing disease. Some of you may also know that we have a Macular Degeneration Research Program, which has supported nearly \$53 million in scientific grants, funding innovative research to end macular degeneration.

Now, I would like to introduce today's guest speaker. Dr. Dilru Amarasekera is a Glaucoma Specialist at Wills Eye Hospital and Clinical Instructor of Ophthalmology at Thomas Jefferson University. Dr. Amarasekera has published numerous peer-reviewed articles in prominent ophthalmology journals and has presented her research at several national conferences. She's passionate about delivering excellent patient-centered clinical and surgical glaucoma care. Welcome, Dr. Amarasekera.

DR. DILRU AMARASEKERA: Thank you. It's a pleasure to be here today.

MS. SARAH DISANDRO: Great. We know this is a Glaucoma Chat, so our listeners are probably familiar with glaucoma and may not be as familiar with macular degeneration. Can you briefly tell us what glaucoma is and what macular degeneration is?

DR. DILRU AMARASEKERA: Sure. These are both two pretty different diseases. Glaucoma is a disease where there is elevated eye pressure in the eye. And over time, this can cause damage to the optic nerve in the back of the eye, which, ultimately, leads to vision loss. And then macular degeneration is actually a disease of the retina, which is also in the back of the eye, and it's caused by proteins and blood vessels that grow in the macula, which is the central part of the retina. And this can also cause primarily central vision loss.

MS. SARAH DISANDRO: Thanks for those descriptions. How would you say glaucoma and macular degeneration are similar to each other? And how do they differ?

DR. DILRU AMARASEKERA: Glaucoma and macular degeneration are similar in that they are both diseases that can cause vision loss. In



glaucoma, the vision loss typically starts in the periphery, and so patients typically experience peripheral vision loss first. And it's usually not until the more advanced stages that patients experience central vision loss. On the other hand, macular degeneration, in its early stages, there's typically not much vision loss, but in its more advanced stages, the vision loss is primarily central. Another big difference between them is how they're treated. As I mentioned, glaucoma is an issue where the pressure in the eye is elevated, so treatment for glaucoma is aimed at lowering the eye pressure. And this is usually done with either eye drops, lasers, or surgeries. On the other hand, in macular degeneration we're trying to remove some of the fluid and some of those blood vessels that sometimes grow on the macula in the back of the eye. And that's usually done with injections.

MS. SARAH DISANDRO: Okay, that's great. That's really interesting. I'm curious about the risk factors for glaucoma and macular degeneration. Are they the same, or do they differ?

DR. DILRU AMARASEKERA: There are a few risk factors between glaucoma and macular degeneration that are similar. The main two are with both diseases, you are at a higher risk for developing the older you are, so age is a risk factor. And the other risk factor that they share in common is family history. If you have a relative that has either glaucoma or macular degeneration, you're at a higher risk for developing the disease that they have. Other than that, the risk factors between the two diseases are fairly different. So, glaucoma is primarily a disease that's more common in African Americans, whereas macular degeneration is actually more common in Caucasians and people with light-colored eyes. Also, for macular degeneration, another big risk factor is smoking. There have been lots of studies that showed that smokers have a much higher risk of developing it. This relationship is not as clear between smoking and glaucoma, but there's some thoughts that there might be a relation there as well, but there is a more defined association between macular degeneration and smoking.

MS. SARAH DISANDRO: Thanks. So, here's something I know a lot of our listeners are probably wondering about: In addition to not smoking, what



ways can someone reduce their risk of developing macular degeneration if they already have glaucoma?

DR. DILRU AMARASEKERA: So, that's a good question. Glaucoma and macular degeneration themselves are two very separate diseases, and just having one does not necessarily put you at risk of the other. But to decrease your risk in general of developing macular degeneration if you already have glaucoma, probably the most important thing you can do is make sure that you're keeping up with your ophthalmology appointments. Whatever interval you're being screened at for glaucoma during these visits, your ophthalmologist will look at the back of the eye, they'll look at the front of the, they'll take some pictures of the back of your eye and scans, depending on the visit. And during these exams, they can see if there's any of the first signs of macular degeneration. And if they see any of these, they can either decide that you need to be followed a little closer or that you need to start treatment. And so, that's probably the most important thing you can do. As we talked about, if you're a smoker, smoking cessation will decrease your risk of macular degeneration. And then, in general, a healthy lifestyle is good for many reasons, but there's some studies that show that general health-like weight loss, blood pressure control, balanced diet-can possibly decrease your risk of macular degeneration, as well.

MS. SARAH DISANDRO: That's really great advice. Now, does the same doctor diagnose both conditions? And does the same doctor treat both conditions?

DR. DILRU AMARASEKERA: So, the same doctor can diagnose both conditions. Any ophthalmologist or a provider that examines you can say that you have either glaucoma or macular degeneration. And, usually, in the early stages of the disease, the general ophthalmologist may feel comfortable managing either glaucoma or macular degeneration, but sometimes in more moderate or severe cases, they may refer you to a specialist. In terms of the specialist for glaucoma, it's managed by a glaucoma specialist, and macular degeneration is managed by a retina specialist. So, if you're in the more advanced stages, you should be seeing a dedicated specialist for it.



MS. SARAH DISANDRO: Okay, so you'd be seeing a dedicated specialist then for both conditions?

DR. DILRU AMARASEKERA: Correct, in the more advanced stages. If the general ophthalmologist doesn't feel comfortable managing the glaucoma or macular degeneration on their own, you would see either a glaucoma or a retina specialist, depending on which disease you have.

MS. SARAH DISANDRO: Got it. This kind of ties into one of our listener questions that we received. One of our listeners wrote in, and she says, "If I have both glaucoma and macular degeneration, how are both of these treated in tandem?" You, kind of, already answered that, but then she also asks, "Does treating one condition take precedence over the other?"

DR. DILRU AMARASEKERA: That's a good question. They can both be treated concurrently, but they're both treated differently as we kind of touched on. So, both are diseases that can cause vision loss if they're uncontrolled, and they both are important to control. Whether one disease takes precedence over another really depends on the unique patient situation, whether you're someone that has very advanced glaucoma but mild macular degeneration, or vice versa. But receiving treatment for glaucoma does not preclude you from receiving treatment for macular degeneration and vice versa. So, as I mentioned earlier, most of the treatment for glaucoma is either drops, lasers, or surgery, and for macular degeneration, it's usually either vitamins or injections, depending on how severe the disease is. And so, you can be taking glaucoma medication or have had glaucoma surgery and still receive injections for macular degeneration, for example. You can receive the treatments at the same time.

MS. SARAH DISANDRO: Okay. That's really interesting. So, I'm going to read some other listener questions that were sent in to us. Another question that we received is: How often—and this, sort of, ties into what you were just talking about—how often do injections for macular degeneration lead to glaucoma? Is that a thing? And if so, how often would that occur?

DR. DILRU AMARASEKERA: That's a good question. So, in the average



person, when you receive an injection in your eye, that's additional fluid that's being inserted into the eye, and so the pressure temporarily rises, and that's a normal, expected thing that happens. But in most healthy eyes, the eye can regulate the pressure on its own and go back to a safe and healthy pressure on its own. Sometimes—especially, I see this more so in patients that already have glaucoma or are at risk for glaucoma sometimes the pressure stays too high for too long. This is rare. And there's not really a percentage out there that, "This is the likelihood that this will happen if you get injections for macular degeneration." But I would say the chance of the pressure going high afterwards and staying too high for too long, I tend to see this more often in people that already have glaucoma or more severe glaucoma or have several risk factors for glaucoma and are being monitored for it. So, in summary, it's fairly rare that these injections actually lead to glaucoma. If it does happen, it's more so in patients whom we were already monitoring for glaucoma.

MS. SARAH DISANDRO: Okay, great. Thank you. Another question that we received from one of our listeners who wrote in asking: They're concerned about what happens, ultimately, if they have glaucoma and macular degeneration and it just continues to progress and continues to progress. Would they then lose all of their sight? That's one of the questions that just came in.

DR. DILRU AMARASEKERA: Sure. I'm sure that's a question that is on people's minds and is something that is stressful to think about. To offer some reassurance, in general, it's very rare to have both glaucoma and macular degeneration. There is a study out there that shows that out of all patients with either glaucoma or macular degeneration, only 3 percent of them actually have both. And even of those patients that have glaucoma and macular degeneration, it's even less common to have such advanced diseases of both that it's severely affecting your vision loss. So, it's very rare for that to happen. Theoretically, it can cause significant vision loss, but this is extremely rare.

MS. SARAH DISANDRO: Okay. Wow, the questions are coming in. We received another question here. This person says their glaucoma doctor wants them to tell their macular doctor to withdraw some fluid in the



eye before injections so as not to increase the pressure. This listener says they're their own advocate but don't really feel it's their place to be the communication center for these two doctors. What are your thoughts on that?

DR. DILRU AMARASEKERA: So, I would say every patient situation is different. So, it's difficult to know the entire context without knowing the patient. But it is a common thing that we recommend sometimes for retina specialists, because sometimes if people are receiving injections, whether it's for macular degeneration or diabetes or other diseases, sometimes removing a little bit of fluid before inserting that volume into the eye puts a little bit of less stress on the eye to then reset the pressure. So, that is something that retina specialists can do if they need to, and typically, it can be communicated provider to provider to make sure that there's nothing lost in communication.

MS. SARAH DISANDRO: All right. Great. Okay. And here's another question. For a patient who developed glaucoma over a decade ago with virtually no progression and pressures under control with eye drops, and they were recently diagnosed with drusen, early-stage dry AMD, are there any particular glaucoma eye drops which would be more helpful in addressing those conditions?

DR. DILRU AMARASEKERA: So, there's no eyedrop that addresses both. Macular degeneration is not addressed with eye drops. And so, the glaucoma eye drops that we have are great and effective for glaucoma, but they do not help with macular degeneration.

MS. SARAH DISANDRO: Okay, great. We have one more question, being screened now, so I'm just going to give that one a moment to come in. So, we just got another question in that says, "I have glaucoma and not macular degeneration, but would taking PreserVision® or something similar help prevent macular degeneration?" So, the person has glaucoma, they don't have macular degeneration, and they're considering taking some vitamins, possibly.

DR. DILRU AMARASEKERA: That's a good question. So, they're wondering if taking the PreserVision vitamins without any signs of macular



degeneration will decrease the risk of macular degeneration. In general, we don't recommend taking the vitamins if there's no signs of macular degeneration or if it's not recommended by your ophthalmologist.

MS. SARAH DISANDRO: Right. And so, this probably goes back again to eye exams, the importance of following your doctor's treatment plan and just continuing to get your eyes checked regularly to be able to look ...

DR. DILRU AMARASEKERA: Exactly. The most important thing you can do is keep up with your appointments just so that they can see if there's any signs of macular degeneration that might then lead to them saying you could benefit from taking the PreserVision vitamins.

MS. SARAH DISANDRO: Okay. Well, fantastic. Thank you, Dr. Amarasekera, for the invaluable insights you shared with us today. To our listeners, thank you so much for joining our Glaucoma Chat. I sincerely hope you found it helpful. Dr. Amarasekera, before we close, do you have any final words of advice for our audience?

DR. DILRU AMARASEKERA: Before we leave, I just wanted to thank the BrightFocus Foundation and Sarah for having me today. It was really great chatting with you and the audience. And my final parting words of advice would be whether you have glaucoma, macular degeneration, or healthy eyes, to make sure that you're following routinely with your ophthalmologist and keeping up with your appointments, because for both of these conditions, the best thing that you can do is early detection to prevent vision loss.

MS. SARAH DISANDRO: Fantastic. Thank you so much. Our next Glaucoma Chat will be on Wednesday, March 12. Thanks again for joining, and this concludes today's Glaucoma Chat.



Useful Resources and Key Terms

BrightFocus Foundation: (800) 437-2423 or visit us at <u>BrightFocus.org</u>. Available resources include—

- Glaucoma Chats Archive
- Research funded by National Glaucoma Research
- Overview of Glaucoma
- Treatments for Glaucoma
- <u>Resources for Glaucoma</u>
- Expert Advice for Glaucoma
- <u>Research funded by Macular Degeneration Research</u>
- Overview of Macular Degeneration
- Treatments for Macular Degeneration
- <u>Resources for Macular Degeneration</u>

Helpful treatment options or resources mentioned during the Chat include—

• PreserVision® vitamins

