



CLINICAL DIABETES MANAGEMENT

Preventing Vision Loss in Diabetes

[Announcer] This podcast is presented by the Centers for Disease Control and Prevention. CDC – safer, healthier people.

[Dan Hazelwood] Thank you for joining us for this edition of Clinical Diabetes Management brought to you by the National Diabetes Education Program or NDEP. NDEP is a joint initiative of the Center for Disease Control and Prevention and the National Institutes of Health. I'm your host, Dan Hazelwood.

Our topic today is preventing vision loss in diabetes. Diabetes is the number one cause of blindness among working age adults. Diabetic retinopathy causes twelve to twenty four thousand new cases of blindness each year, and yet in most instances, blindness from diabetes is preventable. Joining us in the studio today is Dr. Susan Primo, Associate Professor of Ophthalmology at Emory University and a member of the National Diabetes Education Program. Also joining us is Lynn Baillif, a Certified Diabetes Educator from the National Federation of the Blind, and, by phone, Mr. Tom Ley, a person with vision loss and diabetes. Welcome.

[Dr. Primo] Thank you.

[Lynn Baillif] Glad to be here.

[Tom Ley] Thank you.

[Dan Hazelwood] Dr. Primo, why are people with diabetes at risk for vision loss?

[Dr. Primo] Diabetes can affect the eye in many ways. Probably the most common cause is diabetes retinopathy, and this is a disease where diabetes affects the back of the eye, the small vessels in the retina in the back of the eye. Unfortunately diabetes affects the retina just like it affects many other tissues in the body by causing changes to the blood vessels in the back of the eye and it causes leakage in other areas, so that people are at risk for diabetic retinopathy. They also are at risk for other diseases such as cataract and glaucoma. It's known that people with diabetes are at a higher risk for diabetes and glaucoma which is a disease where the optic nerve is affected.

[Dan Hazelwood] What symptoms does a person with diabetic retinopathy have?

[Dr. Primo] Unfortunately, there can be no symptoms at all. So a person can have 20/20 vision and still have diabetic retinopathy.

[Dan Hazelwood] A person can have no symptoms at all?

[Dr. Primo] Yes, there are often no symptoms to having diabetic retinopathy. A person could conceivably have 20/20 vision or almost near-perfect vision yet still have the ravaging effects of diabetic eye disease.

[Dan Hazelwood] Then how can you tell if someone does have diabetic retinopathy?

[Dr. Primo] Probably, the most important way is for patients to get a dilated eye exam by their eye care professional.

[Dan Hazelwood] Is diabetic retinopathy treatable?

[Dr. Primo] Diabetic retinopathy is often treatable. However, it must be caught early, and prevention is the key. As I mentioned, a person must get a dilated annual eye exam by an eye care professional. When this eye exam occurs, the eye care professional can check to see if there are changes to the tiny blood vessels in the back of the eye where leakage may occur. At that point, if the leakage and the damage is severe enough, there are treatments, such as laser treatment or even injections these days to help control the fluid in the back of the eye.

[Dan Hazelwood] Thank you, Dr. Primo. Mr. Ley, what was it like when you began to lose your vision?

[Tom Ley] Well it was very scary. I had begun to lose some vision and I thought I needed to get a better prescription for my eyeglasses. And I really didn't say anything to my doctors. I had heard that diabetes could cause blindness but I had no idea that it would ever happen to me or that it could happen so suddenly. You can never be on cruise control with your diabetes. If the doctor is casual about the diabetes and tells the patient "Oh, don't worry about it; we'll just give you some medicine, you'll be fine", I think the patient takes their key from that and they don't take it seriously either. Having those annual eye exams, I think they could have saved me so much so much trouble and maybe even have prevented my blindness – who knows?

[Dan Hazelwood] Mr. Ley, thanks for joining us.

[Tom Ley] Thank you.

[Dan Hazelwood] Ms. Baillif, what can a person with diabetes do to protect his or her vision?

[Lynn Baillif] The most important thing a person could do is to control their blood sugar and their blood pressure.

[Dan Hazelwood] What can a health care professional do to facilitate this process?

[Lynn Baillif] Health care professionals should refer people with diabetes to diabetes self-management programs to assist them in making the lifestyle changes needed to achieve diabetes control.

[Dan Hazelwood] What resources does the National Federation of the Blind offer to people with diabetes?

[Lynn Baillif] The National Federation of the Blind produces a free magazine called “Voice of the Diabetic” that provides information on diabetes self-management. Additionally, the message of the National Federation of the Blind is that if vision changes occur, managing your diabetes is still possible.

[Dan Hazelwood] How can people contact the National Federation of the Blind?

[Lynn Baillif] Our website is www.nfb.org or we can be reached at our toll-free number 888-581-4741.

[Dan Hazelwood] Dr. Primo, what is the link between tobacco use, diabetes, and vision loss?

[Dr. Primo] We know that about twenty percent of people with diabetes smoke. We also know that diabetes can be affected by the nicotine that constricts the blood vessels in the back of the eye, and this really sets up the stage for diabetic retinopathy and the other complications. So it really becomes important that we tell our patients why they should stop smoking, and refer them to a quit line.

[Dan Hazelwood] What can clinicians who are not eye specialists do to protect their patients with diabetes from blindness?

[Dr. Primo] It’s really important that patients have good metabolic and glycemic control. That can be achieved by following the ABCs: hemoglobin A1C levels should be kept below 7 percent, blood pressure should be well-controlled, as well as cholesterol. It’s also important that all diabetic patients get a dilated eye exam once a year.

[Dan Hazelwood] Where can health care professionals go to get more information about preventing vision loss due to diabetes?

[Dr. Primo] More information can be obtained from the National Diabetes Education Program or NDEP. It has a new set of tools for health care professionals, and they recently revised a monograph called *Working Together to Manage Diabetes*. This Guide focuses on the importance of team care and team management and what all health care professionals need to know about preventing diabetes complications. So, you don’t have to be a specialist to recognize the signs and symptoms of serious eye problems and educate patients about how to prevent vision loss. The *Working Together Guide* is free. Visit www.YourDiabetesInfo.org and then click on “Publications Catalog” or you can call the toll free number at 1-888-693-NDEP.

[Dan Hazelwood] Is *Working Together* available for continuing medical education credit, or CME?

[Dr. Primo] Absolutely, Dan. Continuing education is available for physicians, nurses, pharmacists, and health educators. To access this on-line self-study, visit www.YourDiabetesInfo.org and click on “Publications Catalog.”

[Dan Hazelwood] What else is available from NDEP?

[Dr. Primo] NDEP also has materials for health care professionals, and for people with diabetes in English, Spanish, and 15 Asian and Pacific Islander languages. They have materials for special groups, such as children with diabetes. All NDEP materials are free. Visit the web site to download materials or order print copies.

[Dan Hazelwood] Dr. Primo and Ms. Bailiff, what is the one take-home message you’d like to leave with our listeners?

[Dr. Primo] I think that it’s important to use the NDEP materials. That’s a team management approach and it takes all of us working together.

[Dan Hazelwood] And Lynn?

[Lynn Bailiff] Diabetes self-management education is essential to achieve good diabetes control and that if vision changes should occur, the National Federation of the Blind has resources available to help.

[Dan Hazelwood] National data tell us that only 55 percent of people with diabetes are getting annual dilated eye exams. It’s important for all health care professionals to understand that optometrists, as well as ophthalmologists are licensed and qualified to perform a comprehensive diabetes eye exam. The key is that people with diabetes need a comprehensive dilated eye exam, not just a visual acuity check.

The National Diabetes Education Program, or NDEP, has more information and free educational materials for health care professionals and for people with diabetes. Visit www.YourDiabetesInfo.org or call toll free, 1-888-693-NDEP.

[Announcer] For the most accurate health information, visit www.cdc.gov or call 1-800-CDC-INFO, 24/7.