

Sight Loss Prevention and Diabetes Plain Language Summary

Diabetes Canada believes that people with diabetes should have the best information available to guide their choices about diabetes management. Knowing the most current research and recommendations about diabetic retinopathy will help people affected by diabetes avoid the risk of sight loss.

Background

Diabetic retinopathy (DR) is an eye condition that can cause blindness in people who have either type 1 or type 2 diabetes. It is the leading cause of new cases of legal blindness in individuals 20 to 64 years old. People living with diabetes are 25 times more likely than the general population to become blind. Sight loss caused by DR is linked to increased falls, hip fractures, and death. The cost of treating DR in Canada was estimated to be \$250 million dollars in 2020. As the number of Canadians with diabetes increases, the negative impact of DR will become a bigger burden on society and the economy.

There are several things that increase the risk of DR. This includes how long someone has had diabetes, whether their A1C is above their target range, high blood pressure, unhealthy levels of one or more kinds of fat (lipid) in the blood, low red blood cell count (or anemia), being pregnant with type 1 diabetes, and high levels of protein in the urine. Effective management and treatment of these factors can slow the damage from DR.

More than one-third of people living with untreated DR will become legally blind and nearly 30% of these people will develop severe sight loss within 3 years. Early DR often has no symptoms; and people only become aware when they are screened for it, or it is accidentally discovered during a routine check-up. Increased and regular screening for DR is linked to better vision outcomes for people with diabetes. Unfortunately, in Canada, many people don't get screened for DR. This may be because people can't access an eye care professional near them (such as an optometrist or ophthalmologist), or they can't reach one because of other reasons such as poor health. People with diabetes also may not be aware of the importance of getting screened. Frequent and open communication with the health-care team about how, when, and where to be screened for DR is essential for the best management of diabetes.

In addition to getting screened, DR can be reduced by focusing on healthy behaviours that help to manage blood sugar and blood pressure, like regular physical activity and healthy eating.

Considerations

DR screening is effective and low cost compared to the government-funded disability programs that would be provided to people who lose their sight. However, screening is only effective if people can access services to treat DR after diagnosis. Some Canadian communities have difficulty accessing health-care services such as screening and treatment for DR. Compared to other Canadians, people living in northern, remote, and rural communities, Indigenous Canadians, and visible minorities experience far more sight loss caused by DR. Strategies to increase DR screening should focus on local needs, because not every Canadian has the same access to services.

Recommendations

1. Health-care providers should include DR screening, prevention, and treatment in the health-care routine of their patients with diabetes.
2. Health-care providers should seek to educate people with diabetes about the importance of DR screening as part of diabetes self-care. This includes sharing information on diabetes vision-related complications in a language their patients understand.
3. People with type 1 or type 2 diabetes should get a complete eye exam and discuss how often it is recommended with their diabetes health-care team.
4. People with type 1 or type 2 diabetes should regularly communicate with their health-care providers about their diabetes care plan including diet, exercise, and medication.
5. People with type 1 or type 2 diabetes should continue to manage their diabetes to prevent or delay the onset of diabetes-related complications, including blindness.

For people that would like more information, Diabetes Canada's position statement on [Sight Loss Prevention and Diabetes](#) gives an overview of the latest evidence on the impact of sight loss due to DR.

Publication Date: March 2022

Cite As: Sight Loss Prevention and Diabetes: Summary. Ottawa: Diabetes Canada; 2022.

For More Information: Please visit www.diabetes.ca

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