

is not damaged and vision is blurred because of vitreous hemorrhage, sight may return to normal after the blood clears. There are no special dietary supplements recommended for diabetic retinopathy. It is very important to follow your regular diabetic diet.

Vitrectomy surgery can remove blood and scar tissue from the eye in people with severe proliferative diabetic retinopathy. Unfortunately, doctors cannot yet replace the retina/macula.

QUESTION #9

I was diagnosed with minimal retinopathy this week by my ophthalmologist. I have had the disease for under five years. Most of my A1c tests have been at the high side of

normal or a little over. I have started taking rezulin and this has given me even better control with the same small doses of insulin. So, my question: Once retinopathy has started, can better control reduce or eliminate it?
ANSWER

Strict control of blood sugar definitely reduces the risk of visual loss from diabetic retinopathy. However, it is very unusual for retinopathy to disappear completely.

Disclaimer: The responses provided through this service are not intended to replace consultation with an ophthalmologist. This question and answer service is intended for general educational purposes only and the responses represent the approach of the responding physician given the facts presented, not necessarily the only or best method or procedure in every case. Please refer to the Academy's full disclaimer.

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EASY GUIDE TO DIABETES

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Diabetic Eye Disease

Information From Your Eye M.D. Approximately 16 million Americans have diabetes. And 5 million are at risk for vision loss because they don't know they have the disease. Each year, 12,000 to 24,000 individuals lose their sight due to diabetes. Diabetic eye disease, a group of eye problems that affect those with diabetes, includes diabetic retinopathy, cataracts and glaucoma. The most common of these is diabetic retinopathy, the leading cause of new cases of blindness among working-age people in the United States. If you have diabetes, you are likely to get cataracts at a younger age, and your chances of developing glaucoma are doubled.

What Is Diabetic Retinopathy?

Diabetic retinopathy is a potentially vision threatening condition in which the blood

vessels inside the retina become damaged from the high blood sugar levels associated with diabetes. The longer you have diabetes, the greater your chance of developing diabetic retinopathy. More than one-third of those diagnosed with diabetes don't get the recommended vision care.

Recommended Care

Once diagnosed with diabetes, schedule a comprehensive dilated eye evaluation with your Eye M.D. at least once a year. Your Eye M.D. will recommend more frequent examinations if abnormalities are detected. Women with diabetes also should be examined if considering pregnancy, early in the first trimester, and every one to three months during pregnancy because diabetic retinopathy can progress much more rapidly during pregnancy.

Recent studies show that intensive control of diabetes with self-monitoring of blood sugar levels and multiple daily insulin injections or an insulin pump can significantly slow

Cone-rod dystrophy would not be mistaken for diabetic retinopathy. The two conditions are very different. Once in a while, diabetic retinopathy is found in someone who does not know they have had diabetes for years. The American Diabetes Association estimates there are 8 million Americans who have undiagnosed diabetes.

QUESTION #7

My middle-aged mother had laser treatments for diabetic retinopathy. Since then, she says she doesn't see as well at night and is bothered by the glare of headlights. She says it is a small price to pay for keeping her sight. Is this a normal consequence of laser therapy?

ANSWER

People with proliferative diabetic retinopathy often have difficulty with night vision caused by a decrease in blood flow to the area of the retina that sees at night.

Panretinal laser, used to treat proliferative retinopathy, may make night vision worse. Laser surgery for macular edema is not likely to affect night vision. Macular edema or cataract are more likely to cause glare than laser surgery. By the way, I agree that decreased night vision is a small price to pay for keeping eyesight.

QUESTION #8

Is there a cure for partial sight loss as a consequence of diabetic retinopathy? What diet would you recommend for people having diabetic retinopathy (zinc rich, etc.)?

Can diabetic retinopathy be counter-arrested by surgery, e.g. replacing part of the retina/macula?

ANSWER

It depends on the cause of the vision loss. For example, laser surgery for macular edema will prevent further visual loss more often than it will improve vision. If the macula

bleed, a second operation may be helpful. Vitrectomy accelerates cataract formation, especially over age 50. We don't know why cataracts develop more quickly after vitrectomy. The bleeding will not necessarily cause more scar tissue to develop. Your ophthalmologist will advise you on your particular risks.

QUESTION #4

I would like to know if it is reasonable to perform a PRK on a 30-year-old patient with myopia of 3.5 diopters. His eye fundus shows a background diabetic retinopathy with a few microaneurysms.

ANSWER

The PRK will not have any effect on diabetic retinopathy. It is reasonable to proceed.

QUESTION #5

I have had laser treatments for diabetic retinopathy. One eye

still has neovascularization. What additional treatments are there?

ANSWER

Laser surgery usually causes neovascularization to shrink, but often it does not disappear. If it is not bleeding, growing or causing distorted vision, it probably does not need any further treatment. If the remaining neovascularization does cause vision problems, more laser or vitrectomy surgery may be recommended.

QUESTION #6

Is it possible to be suffering from diabetic retinopathy but not have any other outward symptoms of diabetes? Would this disease be easily diagnosed when the patient has undergone intense eye exams or can this be easily mistaken for other eye diseases? My daughter has been diagnosed with a "cone-rod dystrophy." Can this be mistaken for diabetic retinopathy?

ANSWER

the development of diabetic retinopathy and other complications from diabetes. As always, early diagnosis of diabetes and the effective control of blood sugar levels and hypertension through diet and exercise can help control eye diseases associated with diabetes.

Symptoms

Because there are often no symptoms in the early stages of diabetic retinopathy, your vision may not be affected until the disease becomes severe.

You should also see your Eye M.D. (ophthalmologist) promptly if you experience: Blurred vision that last more than a few days Blurred vision that is not associated with a change in blood sugar Floaters

Treatment

An effective partnership between you, your primary care physician and your Eye M.D. is essential to assure proper eye care and treatment. The current primary treatment option for diabetic retinopathy is laser photocoagulation. With the "pan retinal" laser,

the Eye M.D. makes tiny burns on the retina surface removing damaged retinal tissue. This helps to stop or prevent growth of abnormal blood vessels that cause vitreous hemorrhage and retinal detachment. The "focal" laser helps to close leaking blood vessels, which lead to macular edema. When performed promptly, laser photocoagulation helps reduce the risk of severe vision loss by up to 90 percent.

Where Can I Get More Information?

Your Eye M.D. is the best source of information on diabetic eye disease, as well as eye health and safety.

Take Good Care of Your Eyes if You Have Diabetes

If you have diabetes mellitus, you know how your body's inability to use and store sugar can affect your health. Fluctuations in your blood sugar can damage your eyes, although you may not notice it at first. An eye condition

known as diabetic retinopathy is one of the most common complications associated with diabetes and is the leading cause of blindness among working-age Americans.

Your risk of developing diabetic retinopathy increases with the number of years you've had diabetes. After 15 years with the disease, almost 80 percent of people with Type 1 diabetes have some form of diabetic eye disease. Diabetic retinopathy often has no symptoms when it first develops, so regular eye exams with your Eye M.D. (ophthalmologist) are very important to maintain your eye health. Early detection of diabetic eye disease is essential in preventing vision loss. Fortunately, you can significantly reduce your risk of developing preventable vision loss, and other complications of diabetes by using common sense and taking good care of yourself.

If you have been diagnosed with diabetes:

See your Eye M.D. for a dilated eye exam at least once a year. Pregnant women with diabetes should have an eye exam in the first trimester because diabetic retinopathy can progress rapidly during pregnancy.

Maintain a healthy diet

Exercise regularly

Keep your blood sugar regulated

Monitor your blood pressure and keep it under good control, or seek appropriate care

If you notice blurring of your vision or have difficulty doing close work, such as reading, or if your vision becomes spotty or hazy, see your Eye M.D. right away

Welcome to the Diabetic Retinopathy Q&A Archive!

The following diabetic retinopathy questions were asked during June & July, 1997, and have been answered by an American Academy of

Ophthalmology member. -----

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QUESTION #1:
Why is it important that a child receive a dilated examination once a year if the child is diagnosed with juvenile diabetes?

Approximately how many children under age with juvenile diabetes are treated for eye- related problems?

ANSWER:

The American Academy of Ophthalmology recommends a yearly eye exam beginning five years after the diagnosis of diabetes. Diabetic retinopathy almost never occurs before puberty and it is not common for older teenagers to need treatment. However, yearly exams are extremely important in order to prevent serious loss of vision in those that do need treatment.

QUESTION #2:
Is there a cause and effect

relationship between adult onset diabetes and macular degeneration? Will careful control of the diabetes lessen the progress of macular degeneration?

ANSWER:

There is no known relationship between type 2 diabetes and macular degeneration.

QUESTION #3
I have had a partial vitrectomy performed on both of my eyes. My right eye has started hemorrhaging again, just four months after surgery. The doctor believes there is an area of traction causing this. He advises that a second vitrectomy would make cataracts more likely later on. Why is this? And if we don't intervene, isn't more scar tissue likely to build up due to the bleeding?

ANSWER

Vitrectomy usually prevents further vitreous hemorrhage. If the eye does continue to