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Plain Language Summary – FM Clerkship CAT

Combination Cholesterol Treatment in Type 2 Diabetics Can Reduce Diabetic Retinopathy Progression.

About 26 million Americans have diabetes. Diabetes is a disease in which your blood sugar levels are too high. Insulin is a hormone in your blood that removes the sugar. Some people with diabetes do not produce any insulin. This is called type 1. Other people with diabetes do not use the insulin they produce very well. This is called type 2. In either type, blood sugar levels remain too high and can cause many problems.

Do you know what causes the most cases of adult blindness in the United States? It is a complication from diabetes called diabetic retinopathy. Retinopathy means disease of the retina. The retina is light-sensitive tissue in the back of your eye that helps you see clearly. Diabetes weakens the body's blood vessels. The blood vessels in the eye are very small and diabetes can cause them to leak or become blocked. When these problems occur, the eye becomes damaged. The damage leads to decreased vision and even blindness may occur. The best way to prevent diabetic retinopathy is by controlling blood sugar levels.

Many people who have diabetes also have high cholesterol. Cholesterol is fatty substance that is found in many foods and everywhere in your body. When too much cholesterol is in the blood, it sticks to the walls of your blood vessels and narrows them. This is bad for blood vessels in the entire body including the eye. Eating a healthy diet helps lower cholesterol. Medications can also help.

In a recent study, people with type 2 diabetes and high cholesterol had their eyes studied. The study lasted 4 years. A medicine called fenofibrate was studied to see if it could help prevent people from diabetic retinopathy progression. All of the patients were put on a medicine to help lower their cholesterol called simvastatin, but half of the patients took fenofibrate too. The study showed that patients who took the fenofibrate and simvastatin combination lowered their risk to have diabetic retinopathy progression. The risk of diabetic retinopathy progression was lowered from 10.2% to 6.5% over the period of 4 years. This was a very important study because loss of vision and blindness are heavily feared complications of diabetes.

To learn more about diabetes, diabetic retinopathy and high cholesterol click on the links below.

[http://www.nlm.nih.gov/medlineplus/tutorials/diabeteseyecomplications/htm/no\\_50\\_no\\_0.htm](http://www.nlm.nih.gov/medlineplus/tutorials/diabeteseyecomplications/htm/no_50_no_0.htm)

<http://www.nlm.nih.gov/medlineplus/diabeticseyeproblems.html>

<http://www.nlm.nih.gov/medlineplus/cholesterol.html>

This document was created by a medical student enrolled in the Family Medicine Clerkship at the University of Minnesota Medical School as part of the course project. The aim of the project is to present information on a medical topic in the format of a patient education handout. It does not necessarily reflect the views of the University of Minnesota Medical School physicians and faculty. These materials are provided for informational purposes only and are in no way intended to take the place of the advice and recommendations of your personal health care provider. The information provided may no longer be up-to-date since it has not been reviewed since the date of creation. The information provided should not be used to diagnose a health problem or disease, or as a means of determining treatment. In the event of a medical emergency, immediately contact a doctor or call 911.