KELLOGG EYE CENTER
UNIVERSITY OF MICHIGAN
HEALTH SYSTEM

Retinal Artery Occlusion

This material will help you understand retinal artery occlusion, its causes, and how it may be treated.

What is a retinal artery occlusion?

The retina is the layer in the back of the eye that acts like the "film" of the eye. It captures light and sends the images to the brain. To function properly, the retina needs oxygen and other nourishment that comes from blood vessels. Blood enters the retina through a retinal artery and exits through a retinal vein. A clog in the artery or one of its smaller branches is called an occlusion. If this happens, the retina will no longer work due to lack of oxygen. This may cause sudden, painless vision loss. The amount of vision that you will recover depends on the size of the clog and how long the retina goes without blood flow.

A retinal artery occlusion is sometimes called a "stroke of the eye." This is similar to a stroke in the brain, which occurs when there is a clog in the vessels of the brain.

What causes a retinal artery occlusion?

The main way the retinal artery can become blocked is from an embolus. An embolus, or tiny blood clot or piece of plaque may be carried through the bloodstream to the retinal artery from a separate area of the body. An embolus is often a warning sign of cardiovascular disease somewhere else. Your doctor may ask you to have more tests to look at your heart or blood vessels in your neck where an embolus can form.

Less common causes of retinal artery occlusion include giant cell arteritis or trauma. Also, rare causes of thrombus (blood clot), such as lupus, hypercoagulation disorders, or sickle cell disease may be a cause.

Certain conditions increase the chance of retinal artery occlusion. These include high blood pressure, diabetes, and hardening of the arteries.

How is a retinal artery occlusion treated?

Unfortunately there are not many effective treatment options for retinal artery occlusion. There are a few measures that may be tried if you detect the occlusion within a couple hours. However, these often do not work well either. If you have sudden vision loss, you should seek medical attention right away. The long-term treatment of retinal artery occlusion includes seeing your eye doctor regularly to monitor this condition and avoid any complications.

How can I prevent a retinal artery occlusion from happening?

Controlling your blood pressure, cholesterol, and blood sugar levels are important steps in reducing the risk of retinal artery occlusion. Take all of your medications on time. Eat healthy and exercise. If you smoke, try to reduce the amount you smoke or for the best outcomes, quit smoking all together. This will decrease your chances of having another artery occlusion or a bigger stroke in your brain.

If you have a chronic condition such as diabetes or heart disease, you should also see your eye doctor for a complete eye exam at least once per year.

For more information, scan this code with your smartphone or visit the website listed.

http://www.geteyesmart.org/eyesmart/diseases/eye-stroke/index.cfm

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