WHAT IS A CENTRAL RETINAL VEIN OCCLUSION?

After any tissue in the body obtains oxygen and nutrients from the blood stream, the waste products must be carried away. In the retina, this is accomplished through a single blood vessel trunk that has many branches like a tree known as the central retinal vein. On rare occasions, the primary trunk of this vein can become clotted and result in a Central Retinal Vein Occlusion (CRVO). Somewhat like a stroke occurring in the brain, this blockage can have very serious effects on the eye.

WHAT HAPPENS TO THE EYE AFTER A CENTRAL VEIN OCCLUSION?

In the worst cases, the blockage ultimately brings retinal blood circulation to a halt. As a result, blood and fluid back up and cause retinal injury and loss of vision. Over time, as the retina becomes more and more starved for oxygen (called ischemia), the eye over-reacts by trying to make new blood vessels (neovascularization). Paradoxically, these new vessels cause more harm than good, leading to extensive hemorrhaging and a particularly severe form of glaucoma known as "neovascular glaucoma." Left untreated, this can result in total blindness and even loss of the eye.

IS THE PROGNOSIS ALWAYS POOR?

Fortunately, a small but substantial percentage of patients can retain or regain some or most of their vision. An experienced physician can estimate your prognosis. However, since the course of the disease can vary widely, close follow-up over several months will be necessary. Every 4-6 weeks, your doctor will perform a special contact lens examination of your eye and will intervene if and when it becomes necessary.

WHAT CAUSES A CENTRAL VEIN OCCLUSION?

No single cause explains the reason for every patient, however the majority will either have systemic hypertension, glaucoma, diabetes or significant atherosclerosis ("hardening" of the arteries). CRVO may also occur in diseases where the blood is too thick. The conditions associated with CRVO are detected with complete ocular and general examinations, and with laboratory and blood tests. Good control of your diabetes or hypertension, if present, will play an important role in caring for your eye.