Cystoid Macular Edema

What is cystoid macular edema?

The eye is often compared to a camera. The front of the eye contains a lens that focuses images on the inside of the back surface of the eye. This surface, called the retina, is covered with special nerve cells that react to light.

The center of the retina is an area called the macula. The macula is the area of the retina on which images are focused by the lens, and it is responsible for our crisp central vision. The macula can become swollen with fluid for a variety of reasons. When any tissue becomes swollen with fluid it is called edema. When this happens in the macula, it is called cystoid macular edema.

Why do people get cystoid macular edema?

There are many known causes of cystoid macular edema. These include:

• Eye surgery, including cataract surgery and repair of a detached retina.
• Diabetes.
• Age-related macular degeneration.
• Blockage in the small arteries or veins of the retina.
• Inflammation of the eye.
• Injury of the eye.
• Side effects of medications, particularly steroids.

What are the symptoms of cystoid macular edema?

The initial symptom of cystoid macular edema is typically blurry or "wavy" vision, generally in the center of the patient's visual field. Colors may also look slightly different through an eye with macular edema.

How is cystoid macular edema diagnosed?
The only way your doctor can diagnose cystoid macular edema is to examine the dilated eye carefully. A special instrument is used to look inside the eye at the macula.

Sometimes, however, it is not obvious that the macula is swollen with fluid. To make sure, your doctor might also order another test, either an OCT, or optical coherence tomography, or a test called a fluorescein angiogram. An OCT is a painless test that takes just a few minutes. It creates a high-resolution cross-sectional image (like a topographical map) in a manner similar to ultrasound except it uses light instead of sound waves.

In a fluorescein angiogram, a dye is injected into the bloodstream. This dye will glow when an ultraviolet light (a "black light") is shined on it. The doctor uses a special camera that takes pictures of the macula using ultraviolet light. These pictures will show any areas where fluid has collected in the macula.

**How is cystoid macular edema treated?**

Fortunately, normal vision will almost always return after cystoid macular edema resolves, but the treatment depends on the cause. If the cystoid macular edema is caused by a systemic condition, such as diabetes, that condition will have to be managed first. If it is the side effect of a medication, your doctor might substitute that medication with another prescription or discontinue it altogether.

When cystoid macular edema occurs after eye surgery or is related to some type of eye injury or inflammation, your ophthalmologist will often prescribe an anti-inflammatory medication. This could be in the form of pills or eye drops.

No matter what is causing cystoid macular edema or what treatment the doctor recommends, it will probably take several months to go away. The patient should try not to get discouraged. It is important to keep following your doctor's recommendations, even if it seems like the treatment is not
working as quickly as you would like. Eventually, the treatments should work and improve vision.