Patient Information:

Central Serous Retinopathy

Overview:
Central Serous Chorioretinopathy (CSCR), also known as Central Serous Retinopathy or CSR, is a condition that usually affects younger people and is characterized by a build-up of fluid underneath the retina. The retina sits on-top of a layer called the choroid, which is what supplies most of the retina with oxygen and nutrients. A layer of tissue called the retinal pigment epithelium (RPE) separates the choroid from the retina and prevents the accumulation of fluid between the two tissues.

When small breaks occur in the RPE, serous fluid (the clear part of blood) pools under the retina, causing the retina to swell and lift off the layer below it. The cause of these breaks is unknown, though there has been a well-documented association between CSCR and stress.

Cortisol, which has been linked to CSCR, is a natural steroid that is released by the body when a person is under stress. Artificial steroids taken orally or ointment on the skin can also cause CSCR. Some studies have shown an association between sleep apnea and CSCR. In most cases, the condition only occurs in one eye, though in some cases it can occur in both eyes at the same time.

What are the symptoms?
Some patients may have no symptoms; however, most patients complain of one or more of the following symptoms:
1. Decreased vision
2. Distortions
3. Haze over vision
4. Objects appear smaller than normal
5. Central blind spot

How can the doctor determine the extent of my vein?

The doctor will perform a dilated exam using a slit lamp to determine the amount of fluid is under the retina and what extent it is having on the macula. To check the outer retina, the doctor will use an indirect ophthalmoscope. Testing is important because it helps the doctor to precisely document the condition, check for swelling, and measure changes that occur over time. The three types of tests described below are performed in our clinic.

Optical Coherence Tomography (OCT) is a high definition image of the retina taken by a scanning ophthalmoscope with a resolution of 5 microns. These images can help determine the amount of fluid under the retina and how much swelling is present. The doctor will use OCT images to objectively document the progress of the disease throughout the course of your treatment.

Fluorescein Angiography is a test that documents blood circulation in the retina using fluorescein dye which luminesces under blue light. Fluorescein is injected into a vein in your arm and digital fundus pictures are taken afterwards for 10 minutes. The pictures are used to determine the exact point and extent of leakage.

Indocyanine Green Angiography is a test that images the choroid using infrared light. This test is used to determine if there is any vascular abnormalities and/or leaking within the choroid.

What are the risk factors?
CSCR commonly occurs in men between the ages of 25 and 50. Though CSCR predominately occurs in males, it can also occur in females as well (a ratio 8:1). The incidence rate of CSR within the United States is about 9.9 per 100,000 for men and about 1.7 per 100,000 for woman. Factors that have been associated with an increased risk of developing Central Serous Chorioretinopathy include:
1. Male
2. Age between 25-50
3. Systemic steroid use
4. Type A personality
5. Stress
6. Sleep apnea

What treatments are available?
Central Serous Chorioretinopathy usually resolves on its own and the doctor will closely follow you over a three month period. If the condition does not resolve during this time period or if it affects your quality of life and daily activities, treatment may be necessary. Photodynamic Therapy (PDT) is a treatment that uses a photoreactive dye that is activated by a laser to seal the area of leakage. Your condition and the associated risks and benefits of PDT will be discussed with you prior to deciding whether treatment is the proper course of action.

What is my follow up care?
With the consent of your primary care physician, you should stop all steroid treatments, both topically and orally. You should also reduce the amount of stress in your life. It is important to get regular check-ups to track changes in your condition and evaluate whether treatment is necessary for you.