

## Retinal Tear/Detachment

### What is a Retinal Tear/Detachment?

The middle of our eye is filled with a clear gel called vitreous that is attached to the retina, the inner lining of the back of the eye.

As we get older, the vitreous may shrink or change shape. Usually, this doesn't cause damage. However, the vitreous can pull away from the retina, especially if you have nearsightedness (myopia) or inflammation. If the vitreous pulls a piece of the retina with it, it causes a retinal tear. Persistent pull on the tear can lead to a retinal detachment, a condition in which fluid gets under the retina and lifts part or all of the retina away from the back of the eye.

Once detached, the retina no longer works properly, causing vision to become blurry. If not treated surgically, a retinal detachment can cause blindness.

### Symptoms

Symptoms of retinal detachment include:

- Flashes of light
- Floaters (cobwebs)

- Loss of field of vision (blind spot or shadow)
- A sudden decrease in vision

Floaters and flashes can occur without a retinal tear or detachment.

However, if they suddenly become more severe or you begin losing vision, you should immediately call your ophthalmologist.

## **Risk Factors**

Risk factors for retinal detachment include:

- Nearsightedness (myopia)
- Family history of retinal detachment
- Trauma — blunt injury to the eye in the past
- Previous cataract, glaucoma or other eye surgery — approximately one percent of patients who have had cataract surgery ultimately develop a retinal detachment.
- Previous retinal detachment in the other eye

## **Diagnosis**

Your ophthalmologist can diagnose a retinal tear or retinal detachment during a comprehensive, dilated eye exam. Sometimes an ultrasound is also needed.

## **Treatment**

Fresh retinal tears and detachments should be treated urgently since rapid loss of vision can occur. The success rate for repair of a recent,

uncomplicated retinal detachment approaches 90 percent.

## **Treatment for Tears**

Most retinal tears can be sealed if there is no detachment. This can be done through either a laser treatment called photocoagulation or a freezing treatment called cryotherapy. Performed in our office, both of these procedures create a scar that helps seal the retina and prevent fluid from passing through and getting under the retina.

Close follow-up is necessary to make certain that the retina does not detach despite treatment of the tear.

## **Treatment for a Detached Retina**

Almost all patients with retinal detachments must have surgery to place the retina back in its proper position. Surgery is generally performed as an outpatient procedure, and patients may go home the same day. Without surgery, the retina can lose its ability to function and possibly lead to complete loss of sight. The surgical method used to repair a retinal detachment depends on the nature of the detachment. Types of surgery include:

### **Pneumatic Retinopexy**

This is an office-based procedure using a laser (photocoagulation) or freezing therapy (cryopexy) to seal off a tear, followed by injecting a small gas bubble into the eye to reattach the retina from inside the eye.

## **Scleral Buckle Surgery**

This procedure is conducted in an operating room. A permanent, external support to the peripheral retina is supplied by placing a silicone band around the outside of the eye. Such a buckle is generally not visible after the eye has healed.

## **Vitreectomy Surgery**

Also performed in an operating room, this procedure can be used alone or can be combined with a scleral buckle. A small cutting instrument is used to enter the eye through a 1 mm incision, and the vitreous gel is removed and replaced with a gas bubble. The advantage of this method is that all the debris, scar tissue and membranes on the retina can be removed, and the retina flattened at the time of surgery. A laser is used to seal off the tears.

Gas and silicone oil are support agents used inside the eye to keep the retina attached while permanent bonding occurs. A gas bubble is gradually absorbed over a period of several days to several weeks, depending on the specific gas used. A patient cannot travel by air with a gas bubble inside the eye. Silicone oil may be necessary if longer support is required. This allows the eye more time to heal. However, silicone oil is often removed from the eye by a later surgical procedure once the retina is stable. Patients with silicone oil inside their eyes can fly safely.

Vitreectomy, scleral buckle and gas are sometimes used in combination. The success rate can be as high as 80 – 90 percent. However, some eyes will develop recurrent retinal detachment and may need additional surgery.

# Recovery From Retinal Detachment Surgery

Healing time varies from several weeks to months, depending on the extent and severity of the retinal detachment. If the center part of the retina (macula) has been detached, the central (reading) vision may not completely return.

Your Texas Retina Associates doctor will instruct you about postoperative eye drops and activities. Generally, allow at least one month before returning to full physical activity. As noted above, always check with your doctor to determine if it is safe to resume air travel.

Your eye power may change after the surgery. Glasses or contact lenses are prescribed six to eight weeks after successful healing.

Expect the eye to be puffy and red for several days with clear, reddish tears and discharge. Cold packs on the closed eyelids help the swelling go down and provide comfort.

Please contact us immediately during the postoperative period if you experience the following symptoms:

- Significant pain
- Dramatic decrease or loss of vision
- Extreme nausea
- Prolonged vomiting