

Retinal Detachment

What is a Retinal Detachment?

The retina is the light-sensitive layer of nerve tissue that lines the inside of the eye and sends visual messages through the optic nerve to the brain. A retinal detachment occurs when the retina becomes separated from the rest of the layers of the eye. This usually occurs after you develop a tear in the retina. The extent of permanent damage depends on how much of the retina becomes detached and whether or not the center of the retina (the macula) becomes detached. The macula is made up of special nerve cells that provide the sharp central vision needed for seeing fine detail (reading, driving etc.). If your macula has become detached, you have a poor visual prognosis and you may not regain good enough vision to read or drive with that eye even after successful surgery.

Why do I have a Retinal Detachment? What are the symptoms?

A retinal detachment occurs when a tear forms in the retina allowing fluid to get under the retina forming a detachment. They are more common in patients who are very near-sighted, have a family history of retinal detachment, and in eyes that have had prior trauma or eye surgery. Patients often complain of flashes, new floaters and a shadow forming in their vision when a retinal detachment occurs.

Assessment for Retinal Detachment

We are able to detect a retinal detachment during an eye examination. Your surgeon will carefully examine your eye to identify all the retinal tears and determine the extent of the retinal detachment. He may need to press on your eye to examine your retina fully. He will then discuss with you an appropriate surgical plan to most safely and effectively reattach your retina.

There are three basic options to repair of a retinal detachment:

- Pneumatic Retinopexy: This procedure is performed in the office. A gas bubble is
 injected into the eye and the patient is instructed to position the head so the gas bubble
 presses up against the tear. Once the retina is reattached the tear is treated with laser
 retinopexy. Alternatively, the tear is treated prior to gas injection with a freezing
 treatment called cryopexy.
- Scleral Buckling Surgery: Scleral buckling surgery is performed in the operating room.
 A scleral buckle is a piece of silicone that is placed around the eye to indent the wall of the eye to close the retinal tear. Depending on the characteristics of the detachment, subretinal fluid may or may not be drained from the eye. Sometimes scleral buckles are placed along with vitrectomy surgery.
- **Vitrectomy Surgery:** Vitrectomy surgery is performed in the operating room. During a vitrectomy instruments are introduced into the eye, the vitreous gel is removed, the

retina is flattened and retinal tears treated with laser retinopexy or cryopexy. A gas bubble is placed to fill the inside of the eye at the end of surgery. After surgery, head positioning is typically required for the first week following surgery.