

Scleral Buckle

A scleral buckle is a solid yet flexible silicone band placed around the outside of the eye to repair a retinal detachment. Because in a Cryotherapy (freezing treatment) is typically applied to torn areas of the retina during scleral buckle surgery in order to create small scars that will help "spot weld" the retina to the wall of the eye and prevent re-detachment.

For some diagrams of scleral buckle surgery, simply click here.

What to Expect

Before your procedure, your eye undergoing surgery will be dilated in the preoperative staging area by the nursing staff. There, you will meet with your surgeon as well as the anesthesiologist and operating room nursing staff. From there, you will be escorted to the operating room. Once in the operating room, you will have an IV started, EKG leads placed, and a blood pressure cuff applied to monitor you during the procedure. You will then be deeply sedated while your doctor administers your local anesthesia around your eye. You will gradually become more aware of your surroundings as your surgery is started, but you will remain comfortably and lightly sedated throughout the procedure. Many patients sleep throughout the entire process. Alternatively, you may be placed under general anesthesia for your surgery.

Once the retinal detachment is repaired, it is occasionally necessary to inject a gas bubble to help the retina heal in its proper location, particularly if scleral buckle surgery is combined with vitrectomy surgery. This might require that you position your head in a specific manner after the procedure (sometimes even face down) for a determined period of time. If a gas bubble is used, the duration of head positioning will be determined by your doctor during and after the surgery and discussed with you.

After your retinal problem is repaired, the surface layers of the eye will be closed with absorbable sutures that are thinner than a hair. Antibiotics and steroids are injected over the surface of the eye to decrease inflammation and protect against infection after surgery. A patch is placed and then you are brought back to the recovery area where you will be observed for 1-2 hours prior to being released home. The sutures will initially feel a little scratchy, and over 1 to 2 weeks, they will become softer and dissolve away. Also, your eye may feel sore for a few days to a week after surgery and reading may feel slightly uncomfortable. Occasional Tylenol is usually all that is needed for comfort during this period.

Vision recovery after scleral buckle surgery depends largely on the size, location and duration of the retinal detachment. In some cases, surgery is performed in an attempt to prevent further vision loss and not always to improve the vision. Before recommending any surgical procedure, your doctor will discuss with you in detail the reason the surgery may be of benefit, the chances of vision loss, vision preservation, and vision gain with or without surgery, the risks of surgery, and the alternatives (if any) to surgery. If you are considering surgery, please be sure you have all your questions answered by our doctors and staff. If you leave and other questions arise, please feel free to contact us anytime.