

## **EYELID SURGERY FOR THYROID EYE DISEASE**

The inflammation that occurs in Thyroid Eye Disease can cause scarring of the muscles in the eyelids, resulting in eyelid retraction (the eyelids being pulled away from the eye) with possible development of eye exposure (a vision-threatening problem). Many people will have exposure to a degree that causes their eyes to be chronically "gritty-feeling" and watery. In some people, however, dry spots may form on the surface of the eye causing scarring or infection of the eye. Eyelid surgery can reduce eye exposure so that the eyelids are more able to protect the eye. Before surgery, many people with an exposure situation will have the need to constantly squint or frown in order to keep their eyes from drying.

Additionally, thyroid eye disease may cause extra fat tissue deposits making the eyelids appear swollen, puffy, and unsightly. Surgery can correct these problems as well.

### **UPPER EYELID SURGERY**

To help with upper eyelid retraction, surgical loosening of the upper eyelid retractor muscles and release of scar tissue in the muscles can allow the upper eyelids to lower to a more normal level in order to protect the eyes. At the same time, excessive fatty tissue and skin folds can be trimmed to improve appearance. Formulas are sometimes used during surgery to roughly determine the required amount of loosening of the muscles, but significant differences exist in the amount of scarring among different individuals. There are even other profound differences between eyelids in the same person. Following surgery, there is almost always significant improvement, many times exactly the desired amount, but in some cases (about 10%-15%) additional "touch up" surgery is needed to get the eyelids as close as possible to the desired position.

### **LOWER EYELID SURGERY**

Puffiness and retraction similar to that seen in the upper eyelids can also develop in the lower eyelids, so that the lower eyelids are pulled downwards exposing the white portion of the eye causing an unhealthy vision threatening exposure of the eye. Surgical procedures can improve the protection of the eye and the appearance of the lower eyelid. With lower eyelid surgery, the scarred muscle can be loosened and at the same time extra skin folding and fat can be trimmed, as in the upper eyelid. To be able to reposition the edge of the lower eyelid upward, the outside tendon in the lower eyelid must be tightened and a spacer material may be inserted within the eyelid. Resuspension of cheek muscles may be required. This type of procedure will allow the eyelid to resume a more normal, natural position, protect the eye, and provide marked improvement in overall appearance.

## **PROBLEMS INVOLVED WITH EYELID SURGERY FOR THYROID PATIENTS**

### **1. BRUISING AND SWELLING**

There is usually more bruising and swelling after surgery in people with thyroid problems than the standard "baggy eyelid operation" (blepharoplasty), because in autoimmune thyroid disorder the blood vessels around the eye are larger and more leaky. Thus, the tissues tend to swell more. Also, the surgery is more involved. In some situations low dose steroids may be used to reduce the amount of tissue reaction following surgery. Ice packs and head-of-bed elevation help to control bruising and swelling.

### **2. POST-OPERATIVE STIFFNESS OF THE EYELIDS**

Even though the eyelids are improved in position so that they can protect the eye and obtain a more normal appearance, stiffness incurred by the scar tissue may persist to some degree, as it is impossible to remove every bit of scar tissue imposed by the thyroid problem,

### **3. ANESTHESIA DURING SURGERY**

If a person is having one set of eyelids corrected (usually the upper eyelids) the procedure is frequently performed entirely with local anesthesia in the office. If upper and lower eyelids are operated at the same time, this much longer procedure is usually performed with some degree of sedation.

### **4. POST-OPERATIVE CARE**

A person will be ambulatory after eyelid surgery, although application of ice packs and topical medications will be necessary. Sutures will be removed one week after surgery, and a 6 - 8 week checkup will be scheduled.