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Oculofacial Plastic and Reconstructive Surgery
is the highly specialized area of ophthalmology (eye surgery) that treats diseases, injuries, or other conditions concerning the eyelids, brow, lacrimal (tear) system, orbit (eye socket), and adjacent areas of the face.

Patients with problems affecting these areas are best evaluated and treated by a doctor who is a member of the American Society of Ophthalmic Plastic and Reconstructive Surgery (ASOPRS). This indicates that the surgeon is a board certified ophthalmologist (a medical doctor and eye surgeon), and has also had extensive training in oculofacial plastic surgery.

This booklet describes many of the conditions, diseases, abnormalities, and injuries that can be repaired, as well as cosmetic procedures that are performed by qualified oculofacial plastic surgeons. Please do not hesitate to ask for additional information or visit www.asoprs.com.
EYELIDS

Proper eyelid position and function are necessary to ensure continued eye health and unobstructed vision. The eyelids must open and close correctly to spread tears to cleanse and moisten the eye. Sagging eyelids may cause the appearance of fatigue or anger.

Baggy lids
Over time, the upper and lower lids may become droopy or baggy as the eyelid skin stretches, the fat bulges, and muscles weaken. The eyebrows may also sag and droop. These changes are most commonly due to aging, heredity, or sun damage.

Surgery to improve the appearance or function of the eyelids is called blepharoplasty. The goal of blepharoplasty is to diminish the amount of excess or sagging skin, muscle, and fat.

Upper eyelid blepharoplasty is typically performed through an incision hidden in the upper eyelid crease.

Lower lid blepharoplasty can be performed through an incision on the inner surface of the lid to remove or reposition fat (transconjunctival blepharoplasty), or through an incision just below the lashes if excess skin is to be removed as well.

Laser resurfacing, a chemical peel, and Botox® injections can be performed in conjunction with blepharoplasty to further smooth the skin.

Ptosis
Ptosis is the medical term for drooping of the upper eyelid, a condition that may affect one or both eyes. When the edge of the upper lid droops, it may block the pupil and obscure the upper field of vision.

Ptosis that is present at birth is called congenital ptosis. Ptosis can also be acquired later in life as a result of aging, trauma, muscular or neurologic disease. It is not uncommon for a patient to develop upper eyelid ptosis after cataract surgery.

Ptosis surgery is performed to elevate the upper eyelid to restore a full field of vision and symmetry with the opposite upper eyelid. Surgery is performed to correct congenital ptosis in children for the same reasons, and especially to permit normal visual development.

Brow ptosis
If the eyebrows droop or forehead sags, excess skin is pushed down onto the upper lids. A variety of methods can be employed to perform a brow or forehead lift to restore normal position and a smoother appearance to the skin. Incisions can be made directly above the brows, hidden in forehead creases, or along the hairline. Alternatively, the brow and forehead can also be lifted from behind the hairline using an endoscope through small incisions, or through a larger incision as a coronal brow lift.
**Skin Cancers**

Skin cancers are common and are increasing in frequency. All new or changing lesions, and sores that bleed or do not heal should be evaluated to determine if they are skin cancers.

Eyelid skin cancers occur most often on the lower lid, but may also be found anywhere near the eye and adjacent face. A biopsy is usually required to confirm the diagnosis of skin cancer.

Early and complete surgical removal of eyelid skin cancers is vital to reduce the chance of a recurrence, and to reduce the risk of spread to other parts of the body. The eyelid and surrounding areas can be surgically reconstructed in order to preserve function and restore appearance.
LACRIMAL SYSTEM

The lacrimal glands, located behind the upper eyelids, produce tears that moisten the eyes. When the eyelids blink, they spread a film of fresh tears across the eye and pump the excess tears into the nasolacrimal duct (tear drain) so they can drain into the nose.

Dry eye

If the lacrimal gland fails to produce enough tears, the surface of the eye dries out, which often causes burning, stinging, and a sandy or gritty sensation. Artificial tears and lubricating ointments may help relieve dry eye symptoms. If adding lubricants does not relieve the symptoms, closing the tear drain may be helpful. In extreme cases, eyelid surgery may be required to protect the eye.

In some instances, treatment may be as simple as applying warm compresses and antibiotic drops, but often, surgery to relieve the obstruction is the most effective treatment.

Congenital lacrimal obstruction

Approximately 7% of infants are born with congenital obstruction of the tear drainage system in one or both eyes. This percentage is even higher in premature infants.

Initial treatment involves massaging the area around the affected lacrimal sac to force the tears down the nasolacrimal duct and to push open the membrane causing the obstruction. Antibiotic drops or ointment may also be prescribed. If massage does not relieve the obstruction, tear duct probing may be necessary to do so.

Tearing

If the lacrimal gland is working properly, but the tears do not drain through the nasolacrimal duct because it is blocked, the eye may feel watery, or tears may overflow onto the cheek. Tears trapped in the nasolacrimal duct also can become stagnant and infected.
**Orbit**
The *orbit* is the bony socket that surrounds and protects the eye. The orbit contains the eye, eye muscles, tear gland, arteries, veins, and nerves. All of these structures are cushioned by an intricate system of supporting membranes and fat.

For many people, the discomfort from thyroid eye disease can be treated with topical lubricants, wrap-around tinted glasses, and sleeping with eye shields and the head elevated.

When there is active inflammation with more acute symptoms, oral cortisone or other anti-inflammatory medications may be needed to reduce the swelling. Radiation is sometimes used to treat active inflammation as well. If the swelling behind the eye is severe enough, surgery may be necessary to decompress the orbit.

The function and appearance of the eyes can usually be improved by reconstructive eyelid or orbital surgery. Surgical treatment is generally delayed until the active inflammation subsides. The particular surgical technique used will depend on the type and severity of the eye problems.

**Thyroid eye disease**
*Hyperthyroidism* is a condition in which there is overproduction of thyroid hormones. Abnormal antibodies that attack the thyroid gland cause it to become overactive. These same antibodies may cause swelling and inflammation in the orbit, including the muscles that move the eyes and eyelids, and soft tissue around the eyes. As a result, people with hyperthyroidism may experience eyes that protrude, lids that open too widely, infrequent blinking, or eyes that may not move together well causing double vision.

**Orbital tumors**
Tumors may arise in the orbit or spread to the orbit from other areas. As these tumors enlarge, they may cause the eye to protrude and eye movement may be affected. Fortunately, most orbital tumors are not malignant. Orbital tumors require a sophisticated diagnostic evaluation to determine the appropriate course of therapy. Treatment may involve oral medications, surgical removal, radiation, or chemotherapy.
TRAUMA
Injuries near the eye may result in damage to the eyelids, lacrimal system, orbital bones, or eye. Lacerations of the eyelids need to be meticulously repaired in order to restore the eyelids’ protective function. If the tear ducts are injured, proper repair is necessary in order to preserve normal tear drainage. Fractures of the eye socket and bones around the eye can lead to facial deformities, poor eye movement, and cause the eye to sink inward, and must be properly repaired to restore function, protection, and appearance.

LOSS OF AN EYE
Loss of an eye can be a devastating experience with emotional and physical consequences. Removal of an eye may be necessary following severe injury, to control pain in a blind eye, to treat some intraocular tumors, to alleviate a severe infection inside the eye, or for cosmetic improvement of a disfigured eye. Rapid recovery, reconstruction, and rehabilitation are the goals of treatment.

Enucleation is the surgical removal of the entire eye. Evisceration is the surgical removal of the contents of the eye, leaving the white part of the eye intact. The choice of procedure depends on many factors, and these are discussed prior to surgery.

Several weeks after surgery, a custom-made artificial eye, or prosthesis, is made by an ocularist. The front surface of the prosthesis is skillfully painted to match the natural eye. The back surface is custom-molded to fit exactly in the eye socket. The objective of the reconstructive surgery and fitting of the prosthesis is to achieve the best attainable appearance and movement.
Cosmetic Procedures

In addition to traditional surgery, there are several procedures the oculofacial surgeon employs to enhance the appearance of the skin.

Botox®

Botulinum toxin (Botox® and others) is used to treat frown lines and crow's feet by temporarily weakening the muscles that wrinkle the skin. The effects from these injections last several months, and help maintain a youthful appearance.

Collagen and fillers

Fillers such as collagen or hyaluronic acid (Restylane®, Hylaform® and others) can be injected to fill in deep creases or scars, improve facial contours, and to give body and definition to the lips.

Skin rejuvenation

Lasers, Intense Pulsed Light sources, and other devices can be utilized to fade brown spots, and to eliminate spider veins and birthmarks. These devices, along with chemical peels, can also be used to tighten the skin.