

AMERICAN SOCIETY OF
OPHTHALMIC PLASTIC AND
RECONSTRUCTIVE SURGERY



The American Society of Ophthalmic Plastic and Reconstructive Surgery (ASOPRS) was founded in 1969 to establish a qualified body of surgeons who have training and experience in this highly specialized field. The purpose of the Society is “to advance training, research and patient care in the fields of aesthetic, plastic and reconstructive surgery specializing in the face, orbits, eyelids and lacrimal system.”

In the United States, there are only a few hundred ASOPRS members, surgeons who have devoted themselves to the specialty of oculo-facial plastic surgery. It takes years of specialized training to safely perform procedures on the delicate tissues around the eyes. After medical school, ASOPRS surgeons complete four years of eye surgery training and become board certified ophthalmologists. Then, after two years of extensive oculofacial plastic surgery training, qualifying examinations and a scientific thesis, they are eligible to be considered by their peers for fellowship in ASOPRS.

ASOPRS Executive Office
5841 Cedar Lake Road, Suite 204
Minneapolis MN 55416
952-646-2038 Fax 952-545-6073
info@asoprs.org
www.asoprs.org

BCK Patel MD, FRCS
patelplasticsurgery.com

COPYRIGHT © 2012, ASOPRS. ALL RIGHTS RESERVED.

OCULOFACIAL PLASTIC AND
RECONSTRUCTIVE SURGERY



SURGERY OF THE EYELIDS, BROW,
FACE, TEAR DUCTS, AND EYE SOCKET

AMERICAN
SOCIETY OF
OPHTHALMIC
PLASTIC AND
RECONSTRUCTIVE
SURGERY



2 EYELIDS

Baggy lids

Ptosis

Brow ptosis

Ectropion

Entropion

5 FACIAL SPASMS

5 SKIN CANCERS

6 FACE AND NECK LIFT

7 COSMETIC PROCEDURES

Botox®

Collagen and fillers

Skin rejuvenation

8 LACRIMAL SYSTEM

Dry eye

Tearing

Congenital lacrimal obstruction

10 ORBIT

Thyroid eye disease

Orbital tumors

12 LOSS OF AN EYE

13 TRAUMA

O CULOFACIAL PLASTIC AND RECONSTRUCTIVE SURGERY

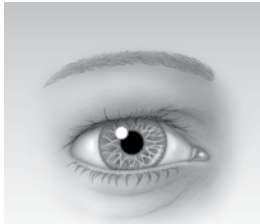
is the highly specialized area of ophthalmology (eye surgery) that treats diseases, injuries, or other conditions concerning the eyelids, brow, lacrimal (tear) system, orbit (eye socket), and face.

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.org.

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.

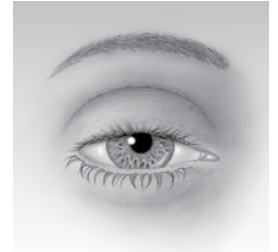
Upper eyelid blepharoplasty is typically performed through an incision hidden in the upper eyelid crease.

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.



Ectropion

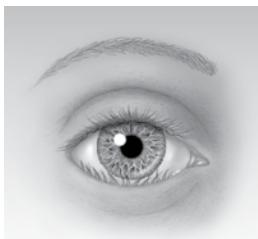
Ectropion is an eyelid that turns out or sags. Ectropion leaves the eye exposed and irritated, and excessive tearing is common.

Generally, this condition is the result of tissue relaxation due to aging, although it may also occur as a result of facial nerve paralysis (Bell's palsy), trauma, scarring, or other surgeries.

Surgery to repair an ectropion often involves tightening the lid, and if necessary, removing any scarring or traction that pulls the lid downward. This usually returns the lid to its normal position and relieves the irritation or tearing symptoms.

Entropion

Entropion is an eyelid that turns in. This causes the lashes to rub against the eye and can be very uncomfortable.



Entropion generally occurs as a result of laxity of the eyelid tendons and weakening of certain eyelid muscles, although it may also occur as a result of trauma, scarring, or other surgeries.

Surgery to repair an entropion often involves tightening the lid, and if necessary, removing any scarring that pulls the lid inward. This usually returns the lid to its normal position and relieves the irritation.

FACIAL SPASMS

Benign essential blepharospasm is an uncontrolled contraction of muscles around the eyes. When the mouth and neck are involved, the condition is



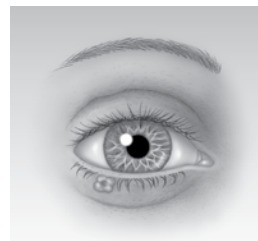
called *Meige syndrome*. *Hemifacial spasm* affects the muscles on one side of the face and can be caused by an irritation of the facial nerve.

These conditions can be treated by injecting botulinum toxin (Botox® and others) into the muscles, or if that therapy is unsuccessful, surgery may be recommended.

SKIN CANCERS

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

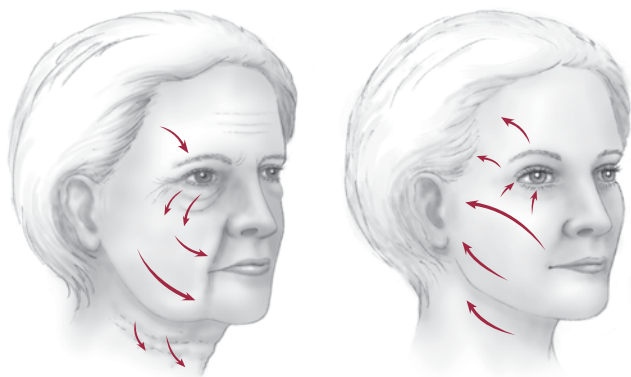


is usually required to confirm the diagnosis.

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.

FACE AND NECK LIFT

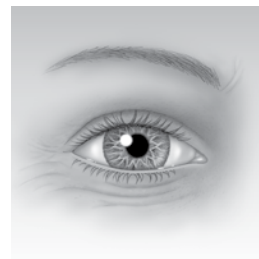
As time passes, our faces and necks age gradually but perceptibly. Sagging cheeks and jowls, “turkey neck”, and wrinkles can cause us to look much older than we feel. Fortunately, dedicated surgeons have developed safe and reliable procedures that can subtly or dramatically improve the undesirable changes from aging.



The purpose of a face and neck lift is to improve the appearance by repositioning the soft tissues of the face and neck to a more youthful position. To achieve a consistent and natural look, most surgeons will lift the cheeks, jowls, and neck simultaneously, while working with the muscle, fat, and skin through incisions hidden around the ear and under the chin. Afterward, a patient should notice a pleasing improvement in cheekbone height, jawline, jowls, and neck. The end result is a natural look of youth and vitality.

COSMETIC PROCEDURES

In addition to surgery, there are several procedures the oculofacial surgeon can employ 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.

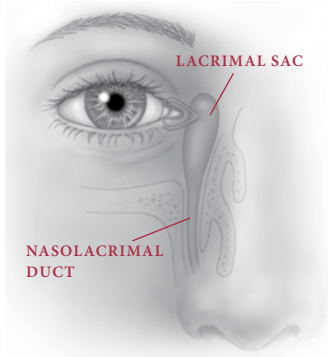
Skin rejuvenation

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.

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.



Tearing

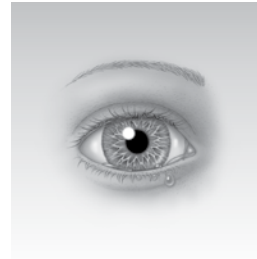
If the lacrimal gland is working properly, but the tears do not drain through the nasolacrimal duct because it is blocked, the eye may

feel watery, or tears may overflow onto the cheek. Tears trapped in the nasolacrimal duct also can become stagnant and infected.

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



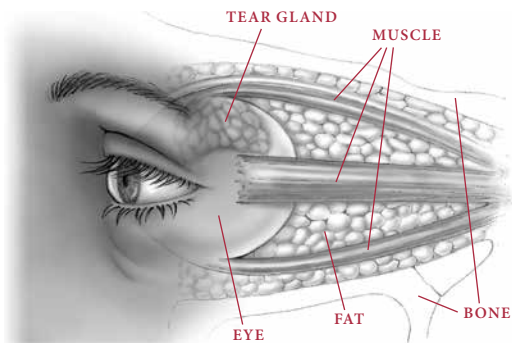
in premature infants.

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.

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.



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.



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.

Orbital tumors

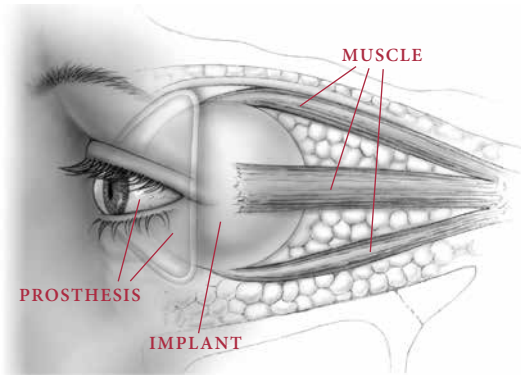
Tumors may arise in the orbit or spread to the orbit from other areas. As these tumors enlarge, they may cause the eye to protrude and eye movement may be affected. Fortunately, most orbital tumors are not malignant. Orbital tumors require a sophisticated diagnostic evaluation to determine the appropriate course of therapy. Treatment may involve oral medications, surgical removal, radiation, or chemotherapy.

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.



TRAUMA

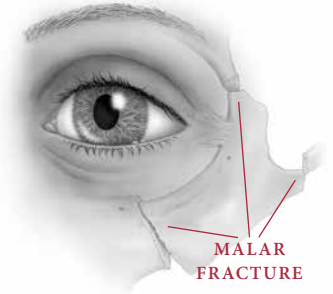
Injuries near the eye may result in damage to the eyelids, lacrimal system, orbital bones, or eye.

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.



BCK Patel MD, FRCS
patelplasticsurgery.com