

Eyelidpedia[®]

A

Alloderm

Type of tissue used as a graft for various types of reconstructive surgery, such as eyelid reconstruction, facial reconstruction, oral surgery, and breast reconstruction. The tissue is acquired from human cadavers and has been highly processed so that only collagen material is left behind. It is commonly used as a graft for lower lid reconstructive surgery (i.e. spacer grafts for lower lid retraction).

Asian eyelid surgery:

Also termed “double eyelid surgery.” Type of eyelid surgery that people of Asian decent wish to undergo to help better define or create a lid crease. People of Asian decent that have excess skin that drapes over their lashes wish to undergo a double lid surgery, where a new crease is made to help allow the skin to drape at a higher point, allowing their lashes and part of their eyelid to be more visible.

Aesthetic surgery

This is a sub-branch of plastic surgery where the surgeon uses the principles of cosmetic surgery to help improve or enhance someone’s appearance.

Autologous fat grafting

Type of procedure that uses one’s own body fat and to transfer it to another location for volume augmentation. Common sites of transferring fat include the face, breasts, and buttocks. Common sites of harvesting fat are the abdomen, flanks, and inner thighs.

A-frame deformity

An eyelid deformity that can occur after blepharoplasty after having excessive upper lid fat removed. The upper lid has a hollowed out appearance similar to an “A frame”.

Absent lid crease

A lack of a lid crease can be seen in many people of Asian decent. The lid fold falls down near the lashes. Patients that undergo Asian eyelid surgery (i.e. Double Eyelid Surgery) wish to have a lid crease so that more of their eyelid is visible after surgery.

Anterior lamella

The area of the eyelid comprising the skin, subcutaneous tissue and the orbicularis muscle.

Arcus marginalis

Fibrous tissue that attaches the inner eyelid structures to the orbital bone. This tissue is often released in lower lid blepharoplasty to allow for lower lid fat repositioning.

Ablative skin resurfacing

Through the use of either laser or chemical peels, a thin layer of skin layer is carefully removed. The aim is to improve the fine wrinkles and pigmentary changes.

B

Botox

A neurotoxin made from the botulinum toxin which is derived from the bacterium botulinum clostridium. It is used in cosmetic procedures to prevent or reduce wrinkles such as the forehead, glabellar lines, and crow's feet. It also has indications for non-cosmetic use as well in medicine.

Benign neoplasm of eyelid

Non-cancerous lesion (also termed tumors) of the eyelid. They can still grow and often require excision due to their size. There are various types of benign neoplasms such as nevus, cysts, chalazion, and xanthelasma.

Basal cell carcinoma of eyelid

A cancerous (malignant) eyelid lesion arising from the basal cell layer of the eyelid skin. It is the most common eyelid malignancy and is usually slow growing. It is treatable by complete excision. A biopsy usually differentiates whether the lesion is benign or cancerous.

Blepharoplasty

Surgery of the upper and lower eyelids where excess skin and prominent fat pockets are removed to help rejuvenate one's appearance. Blepharoplasty is a type of cosmetic eyelid surgery. It is a surgery that is performed by a plastic surgeon (such as an Oculoplastic surgeon) with extensive experience in eyelid surgery.

Brow position

A reference to the position of the brows in relation to the forehead, the eyelids, and the orbital rim. With aging, the brow position and shape changes and may need to be corrected due to cosmetic or medical necessity reasons.

Brow ptosis

A medical condition that describes the age-related drooping of the brows or loss of the natural shape of the brow. It can also occur as a result of the facial nerve damage following a disease process or trauma.

Browpexy

An operation on the brow to help suspend or slightly lift the brow to a higher position. This procedure can be performed through an eyelid incision (internal browpexy) or through a small incision just near the brow (external browpexy). It is used for a mild case of brow ptosis. It is different from a brow (forehead) lift operation which involves lifting the muscles of the forehead.

Brow lift

Surgical procedure that elevates the position of the eyebrows. It is performed on people that have low set brows. There are different types of brow lifting procedures, such as endoscopic brow/forehead lift, temporal brow lift, coronal brow lift, and direct brow lifting. It can be performed at the same time as other eyelid and facial plastic procedures.

Brow fat pad

It is the main fat tissue within and just below eyebrow. Another name for this fat is retro-orbicularis oculi fat (ROOF) pad. This fat helps to maintain the position of the brow in an elevated and outwards position which maintains the normal facial contours.

Belotero

A compound containing hyaluronic acid which is used as a dermal filler for the treatment of fine superficial wrinkles. Injectable fillers are used to change skin contours to give a more youthful and fuller appearance.

C

Canthopexy

An eyelid procedure performed to help tighten or slightly elevate a lower lid through a lateral canthal approach. It is mostly done for cosmetic purposes and is a lid tightening procedure. It can be performed internally through an upper lid incision or directly through a lateral canthal incision. It is most commonly performed during a cosmetic eyelid surgery (blepharoplasty).

Canthoplasty

An eyelid procedure that tightens and shortens the lid in order to improve the support, position, and/or function of the lid. It is usually used in cases where the lower lid has significant laxity (i.e. ectropion) and/or slightly retracted. A lateral canthal incision is usually used for the approach.

Canthotomy

An operation on the lateral canthus that involves incising it. It is a procedure that allows the surgeon decompress the orbit if there is an orbital hemorrhage. It is also one of the steps involved when performing routine eyelid surgeries such as canthopexies and canthoplasties.

Central fat compartment

It is a fat compartment that comprises the central upper lid (i.e. preaponeurotic fat). The upper lid central fat compartment tends to shrink/atrophy through aging process.

Chalazion

An obstruction or swelling of the meibomian glands in the eyelids, which results in a large, swollen eyelid following an inflammatory process. A chalazion is usually painless and has to be incised to relieve the swelling.

Coronal brow lift

A type of brow lifting procedure where an incision is made around the hairline, and the brows are then elevated. This procedure benefits those with significant brow ptosis and/or ones with a high forehead.

Closed canthal suspension

This procedure is a type of canthal suspension (canthoplasty/canthopexy) which tightens the lower lid. It allows for minimal tissue dissection through an approach with no visible incisions along the skin. It can be done at the same time as a blepharoplasty.

Corneal refractive surgery

Surgery on the cornea to correct vision in those that are near and far-sightedness, with and without astigmatism. Using laser technology, the cornea is reshaped to allow the ability to see without the use of eyeglasses or contact lenses.

Capsulopalpebral fascia (muscle)

A muscle of the lower eyelid that arises from the inferior rectus fascia and inserts into the inferior tarsal end where it forms the lower eyelid crease.

Chemical peel

An ablative skin resurfacing procedure that uses a chemical (i.e. trichloroacetic acid) to help improve the appearance of the skin. The procedure improves skin appearance and can make scars and wrinkles less prominent. It can be done at the same time as other eyelid and facial surgeries.

Canthus (plural canthi)

This refers to the place where the upper and the lower eyelids meet both laterally and medially. It is commonly called the corner of the eye.

Canthal tendon

Tendon structure that appears on the inner and outer side of the eyelid and which helps to suspend the eyelids in their normal position in place. The canthal tendons also help allow the eyelids to function normally in order to protect the eye.

Check ligaments of lateral rectus

A ligamentous structure that connects a muscle of the eye onto the zygomatic bone tubercle of the lateral wall. The ligaments counteract (check) the action of other muscles they are attached to which if left alone would displace the eyeball from the eye socket.

Canthal suspension

Lifting of the lower eyelid laterally to enhance appearance or to correct a complication following other eyelid operations. A minimally invasive process called closed canthal suspension is commonly used.

Conjunctival surface

The inner surface of the eyelid (posterior surface) composed of mucosal tissue. During a transconjunctival lower eyelid blepharoplasty, the conjunctival surface is the first layer to be dissected. It usually heals well with little signs of scarring.

D

Direct brow lift

A specific type of brow lifting procedure. The incision is made directly above the eyebrow in order to lift the brow to a higher position. It is usually placed into a pre-existing wrinkle or right along the eyebrow follicles so that it heals well with little signs of visibility.

Dehisced levator muscle

The physical weakening of the eyelid muscle which leads to ptosis, or a droopy lid. This can happen with age, trauma, prior eye surgery, or even contact lens use. Ptosis repair involves the repair of a dehisced levator muscle, which can be performed through several approaches.

Dermal fillers

Substances which are injected into the dermal or subdermal layers of the skin areas to correct wrinkles, folds, and volume loss. There are four different categories of subdermal fillers: autologous fat, collagens, hyaluronic acid, and synthetic fillers. The most common dermal filler currently used are hyaluronic acid fillers. They have a low allergic profile, reversible, and non permanent.

Dry eyes

A condition where the eyes do not produce enough high quality tears to adequately lubricate and nourish the eye.

Dermatochalasis

Excess skin found on the upper or lower eyelid. When significant enough, it can result in lash hooding and decreased ability to see well in the peripheral visual fields. Upper and/or lower eyelid blepharoplasty helps to improve the condition.

Dark circles

Area of darkened skin, hollowing, and/or fat prominence under the eye that can occur as part of an aging process or other acquired conditions. The lower eyelids appear to have dark circles making the person appear tired and aged.

E

Edema

Swelling due to excess accumulation of fluid in tissues. It can follow a disease condition, injury or poor local circulation. This is routinely seen after eyelid surgery or injectable fillers. It usually resolves with time as the eyelid heals.

Endoscopic brow lift

A procedure for lifting the brow without making an open incision as traditionally done along the hairline. Small incisions are made behind the hair line in the scalp (non-visible) and a small camera (endoscope) is used to carry out the procedure under the skin. The entire forehead and brows are gently elevated in a natural fashion to improve the eyebrow position. This can be done at the same time as a blepharoplasty surgery.

Epiphora

Excessive flow of tears which could be due to excessive production as in irritated eyes. Another cause can be due to poor drainage where the nasolacrimal duct is blocked (nasolacrimal duct obstruction) or some other part of the tear duct system.

External browpexy

A minimally invasive procedure that can be performed by itself or with an upper blepharoplasty that helps suspend or slightly lift the temporal brow. A similar subcutaneous procedure called internal browpexy can also be used but it involves making a dissection through an already pre-existing eyelid incision.

Eyelid skin

Thin layer of skin that serves to protect the eye. It contains many layers which include muscle, fat, eyelashes, sweat and oil glands. Blepharoplasty surgery involves the removal of excess eyelid skin.

Eyelid fold

The amount of skin that rests below the eyelid crease. The fold is the redundant skin that folds over the crease. No everyone has an eyelid fold; some people may not have a fold if they have a high lid crease and no redundant skin. Others may have a low eyelid fold with some of the excess skin touching the lashes. Blepharoplasty surgery can change the eyelid fold depending on the desires of the patient.

Eyelid-cheek vector

The relative position of the eyelid in relation to the lower cheek bone. This is usually an inherited trait. People with midface volume loss often have a negative eyelid-cheek vector. The vector is positive if the cheek bone rests in front of the eyelid. The vector is termed a “negative” vector if the eyelid rests in front of the cheek bone. Negative vector patients may require volume augmentation with fillers or fat grafting during eyelid surgery.

Eyelid bags

Prominent lower eyelid fat pockets, which can be hereditary and/or age related. The fat pockets are in excess and create a bulge. Lower lid blepharoplasty may help in improving the appearance.

Eyelid crease

A natural inward-creasing of the upper eyelid skin, which divides the eyelid into a lower segment just above the eyelashes, and an upper segment that runs from the crease up toward the eyebrow. This is termed a “double-eyelid crease.” The crease is formed from attachments of deeper eyelid muscle structures (i.e. levator complex) that inserts onto the skin. It varies in location, but usually is located above 5-8 mm above the eyelid lashes in Caucasians. The crease is only present in about 50% of the Asian population; in Asians with a present crease, it varies in location and be present just about the eyelashes or several millimeters above the eyelashes. Eyelid creases can be created or increased in height surgically through an eyelid surgery termed “double-eyelid surgery.”

Eyelid retraction

A condition that results in the eyelids to open more widely, resulting in more exposure of the eye itself. The upper and/or lower eyelid can be retracted. Common conditions that can result in eyelid retraction include Grave’s ophthalmopathy (thyroid eye disease), trauma, and previous eyelid surgery.

Eyelid malposition

An eyelid disorder where the eyelid is abnormally positioned. In a normal eyelid, the eyelid rests on the eyeball, but in malpositions, the eyelid can be rotated inward (termed an

entropion) or outward (turned ectropion). Various conditions (congenital or acquired) can result in such eyelid malpositions, and the treatment usually involves surgery.

Ectropion

A disorder of the eye where the eyelid position is turned outwards. It can occur due to advanced age (increased skin laxity), prior eyelid surgery, or trauma. The condition leads to eye irritation, tearing, and ocular inflammation.

Entropion

A disorder of the eye where the eyelid position is turned inward. It can occur due to aging process, prior eyelid surgery, trauma. The condition results in eye irritation due to eyelashes rubbing directly on the eye itself, infection, pain, and discharge. Surgery is required to treat this condition.

F

Facial aesthetics

Refers to cosmetic procedures of the face which serve to improve the facial appearance. It is an important sub-branch of plastic surgery that involves both surgical and non surgical procedures.

Fat grafting

A procedure involving the harvesting of fat tissue from one part of the body, processing it and then transferring it to another part of the body to achieve a fuller appearance at the new site. Facial fat grafting is performed when people require volume augmentation; common areas include the cheeks, midface, and temples.

Fat repositioning lower lid blepharoplasty

A procedure performed during a blepharoplasty to help redistribute some of the excess fat to other locations that are hollow. Rather than completely removing the excess fat when performing a lower eyelid blepharoplasty, some or all of the excess fat can be repositioned to help improve the hollowing seen below the eyelid. The surgeon determines the need to reposition on a case by case basis depending on the amount of hollowing seen below the eyelid.

Festoons

Collection of excess skin along the malar area. The collection can be due to many factors, some involving a collection of fluid (malar or eyelid edema). They can be a result of prior trauma, surgery, infection, inflammation, or uncertain.

Fitzpatrick score

A method of determining the type of a person's skin color. The numerical scale ranges from an increasing pigmentary scale, Type 1 being the very fair skin and Type 5 being the darkest skin pigmentation.

Flower's rule

A measurement that allows the surgeon the maximal amount of skin that can be removed in an upper eyelid blepharoplasty.

Fat pedicle

The eyelid and orbit are comprised of various fat pads, each of them that has a pedicle that meets deeper in the orbit. During blepharoplasty surgery, the excess fat pockets are identified one pedicle at a time so that an accurate removal or repositioning of each pedicle is made.

Fillers to lower lids

Substances used to fill hollowness in the lower eyelids. Commonly used fillers include hyaluronic acid gel or the person's own harvested fat.

Fillers to upper lids

Substances used to fill hollowness in the upper eyelids. Commonly used fillers include hyaluronic acid gel or the person's own harvested fat. Often fillers to lower eyelids are done at the same time when there is hollowing in the lower eyelids as well.

Fractionated laser resurfacing

An ablative laser technique that helps to treat damaged skin from various skin conditions, such as sun damage and wrinkles (rhytids).

5-fluorouracil (5-fu)

A medication commonly used in the treatment of various types of cancers and other conditions that require the reduction of specific metabolic activity. In the oculoplastics field, it is used as an off-label medication to treat scar tissue, chalazions, and persistent inflammation.

Hard palate graft

A type of tissue graft used in eyelid reconstructive surgery including lower eyelid retraction repair. It is harvested from the person's own hard palate along the roof of the mouth. The graft is placed along the posterior portion of the eyelid so that it is not visible but serves as a spacer graft to help improve and elevate the position of the eyelid.

Herniated fat pockets

A condition that is often age-related where the orbital fat pockets become more prominent and visible. They can be seen as pouches of fat pockets, often referred to as eye bags. Blepharoplasty surgery helps remove the excess fat pockets.

Hollow upper sulcus

Volume loss within the central part of the upper eyelid, resulting in a hollow look. It can be a direct result of the aging process or from prior surgery or trauma. Options for treatment include surgery, fat grafting, or injectable fillers.

Hyaluronic acid

A substance that is naturally found in various parts of the body such as the skin, joints, and eyes. Synthetic forms of hyaluronic acid are used within plastic surgery to help augment volume loss and wrinkles through injectable forms of the substance. Some examples of synthetic hyaluronic acid include Restylane, Voluma, Juvederm, Volbella, Perlane, and Belotero.

Hyaluronidase

A natural protein enzyme found in the body. Synthetic forms of the protein help break down injectable hyaluronic acid fillers. It is also used as a medication to help spread the dispersion and delivery of medications such as a local anesthetic.

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Injectable fillers

Substances used to improve early signs of aging, most notably for facial volume loss and wrinkles. Most common types of injectable fillers include hyaluronic acid fillers such as Restylane, Belotero, Perlane, Voluma, Volbella, and Juvederm. Fat grafting and non-hyaluronic acid based fillers are also other types of substances that can be used as injectable fillers.

Internal browpexy

An operation done to lift or resuspend the eye brow, usually done at the same time as a blepharoplasty. The procedure involves the use of a pre-existing eyelid incision (usually a blepharoplasty incision). The procedure offers a minimal lift or resuspension to the brows.

Incision marking

Marks made along skin where a surgical incision will be made. In eyelid surgery, a fine tipped marking pen is used to carefully make the markings to allocate the amount of skin that will be removed prior to the start of the surgery.

Inferior tarsal plate

A thick connective tissue that is located within the lower eyelid just below the eyelashes. It is a support structure for the lower eyelid where vital muscles, hair follicles, and glands attach to.

Inferior tarsal muscle

One of the lower eyelid muscles that helps in maintaining a normal resting tone and position. It is part of the lower lid retractor muscles which are carefully identified and dissected during a lower eyelid blepharoplasty.

Infraorbital rim hollowing

Volume loss along the lower eyelid area. It is most often due to aging can result in under eye circles or shadows. Tear trough deformity refers to a specific area of infraorbital rim hollowing that is located medially closer to nose. Injectable fillers can help address infraorbital rim hollowing. In cases where there is also prominent fat pockets, the excess fat can be repositioned to improve the infraorbital hollowing at the same time as a lower lid blepharoplasty.

Infraorbital rim

Part of the bony eye socket located below the eyelid. It is comprised of the zygoma, maxilla, nasal and lacrimal bone. The lower eyelid and the fat pockets are located above the infraorbital rim.

J**Juvederm**

A type of hyaluronic acid that is used as an injectable filler for wrinkles and volume correction around the face such as the cheeks, temples, lips and nasolabial fold area.

Jowling

Excess lower facial tissue that drapes below the jaw line, resulting in an aged appearance.

L

Lacrimal gland

A tear-producing gland found in each of the eye sockets, above the eyeball, within the superior-temporal aspect of the orbit. It produces the aqueous layer of the tear film which helps to keep the ocular surface healthy and moist.

Lateral brow lift

Another name for temporal brow lift. The lateral or tail of the brow is lifted to a higher position. In contrast to a forehead lift where the entire forehead and brow are lifted, a lateral brow lift lifts the lateral portion of the brow and forehead.

Lateral retinaculum

A combined attachment of structures found laterally that help keep the eyelid suspended in normal position. These structures coalesce approximately 5mm behind the lateral orbital rim at the lateral orbital tubercle (Whitnall's tubercle) which include the lateral canthal tendon, lateral horn of the levator muscle, the check ligaments of the lateral rectus, fibers of the orbicularis oculi, and the lateral aspect of Whitnall's (upper eyelid) ligament and Lockwood's (lower eyelid) ligament.

Levator aponeurosis

A tendon-like sheath that attaches onto the levator palpebrae superioris muscle (levator muscle), and helps to attach the muscle onto the eyelid tarsus and skin, while helping to elevate the lid (lid excursion). If the levator aponeurosis is stretched either through age, trauma, or through repeated surgery, it can result in eyelid ptosis.

Levator palpebrae superioris muscle (levator muscle)

An important muscle in the upper eyelid that serves to elevate and retract the upper eyelid. It is a skeletal muscle. It attaches onto the superior tarsal plate and the skin through its distal tendon-like sheath, the levator aponeurosis. Altogether, the levator palpebrae superioris and the levator aponeurosis are referred to as the levator complex.

Lid-cheek junction

Natural depression or volume loss that occurs along the lateral inferior orbital rim where the eyelid meets the cheek. Tear trough deformity refers to a similar depression or volume loss but along the medial aspect of the inferior orbital rim (closer to the nose).

Lid excursion

Ability of the eyelid to move in upgaze and downgaze. Eyelid excursion tests can be used to determine the severity of certain disorders like ptosis and to assess the functions of the muscles involved (i.e. the levator muscle).

Levator function

The (eyelid) elevation ability of the levator muscle which is the main muscle used to open the eyelid and move it upwards. It helps determine whether there is any ptosis and its severity.

LASIK

An abbreviation for Laser Assisted in-situ Keratomileusis. It is a type of eye laser surgery for correcting refractive disorders.

Lid tone

The underlying resting tone of the eyelid, which is assessed through various tests such as the snap-back test or distraction test. A weakened lid tone can be a result of various factors such as orbicularis weakness or a dehisced lateral canthal tendon. An eyelid with a weak lid tone results in decreased function of the eyelid, leading to various conditions such as eyelid malpositions including ectropion, entropion, lower eyelid retraction, poor lid closure or blink mechanism, or even tearing.

Lateral canthal tendon

A tendinous structure that attaches the eyelids to the orbital rim and helps limit anterior displacement of the globe. The structure is also released during eyelid surgery when the lower eyelid requires tightening (canthopexy) or shortening (canthoplasty).

Lateral orbital tubercle

It is a small raised point along the lateral orbital rim of the zygomatic bone. Another name for it is Whitnall's tubercle. It is an anatomic landmark used during lateral canthoplasty or canthopexy surgeries when tightening or resuspending the eyelid.

Lateral orbital rim

The lateral portion of the bony socket, composed of the frontalis, zygoma, and maxilla bones. Canthal suspension surgery (canthoplasty, canthopexy) involves suspending the lateral portion of the lower eyelid onto the lateral orbital rim.

Lateral horn of levator muscle

The broadened levator aponeurosis that supports the levator muscle on the lateral side. Similar broadening of the aponeurosis is found on the medial (inner) side.

Lockwood's ligament

Hammock-like ligaments found along the lower eyelid that suspends and holds the eyeball in place. It passes underneath the eyeball and between the medial and lateral check ligaments. It is analogous to Whitnall's ligament but found in the lower eyelid.

Lateral hooding of upper lid

Excess skin along the lateral portion of the upper eyelid. When the skin is hooding over the eyelid margin, it can result in a peripheral field reduction. Upper eyelid blepharoplasty can help improve this condition.

Lash hooding

A condition where the excess eyelid skin is draped over the eyelid and rests on the eyelashes. This condition can be improved by an upper eyelid blepharoplasty surgery.

Lagophthalmos

A disorder where a person cannot close the eyes completely even when asleep. The condition can also persist during normal blinking, resulting in dry eyes, ocular irritation, tearing, and corneal injury if not treated.

Lower lid retractors

The muscles in the lower eyelid that work together to facilitate the opening of the eye. They include the inferior tarsal muscle and the capsulopalpebral fascia.

Lacrimal gland repositioning

An operation done to properly position the lacrimal gland when it has prolapsed or displaced inferiorly. The procedure is performed through an upper eyelid incision, and can be done at the same time as a ptosis repair or a blepharoplasty.

M

Marionette lines

Lines beneath the mouth that occur with time and aging. Volume loss is a large factor in their presence. When mild or moderate, injectable fillers can help. When severe, a facelift may be required.

Mueller's muscle

One of the two muscles that plays a role in the opening and closing of the upper eyelid. The other muscle is the levator muscle. Mueller's muscle is controlled through the autonomic nervous system (sympathetic system) and so cannot be controlled by an individual's effort. The muscle responds to topical placement of 2.5% phenylephrine drops, which are used when evaluating a patient for ptosis surgery.

Middle lamella

A layer within the upper and lower eyelid that separates the anterior from the posterior lamella. The middle lamella is the orbital septum.

Midface

A reference to the middle of the face and related structures. It is an important landmark when evaluating aging changes since the midface can undergo volume loss and descent. Injectable fillers or surgery can help improve the midface.

N

Natural looking blepharoplasty™

A trademarked technique developed by Dr. Zoumalan that involves minimally invasive surgery to help refresh one's eyelid appearance. Minimally visible scars are used, and no direct change in shape to the eyelid is noted. This helps reduce the risk of complications and allows the person to recover quickly while still looking natural in appearance.

Upper eyelid nasal fat compartment

One of the two fat pockets in the upper eyelid. The nasal fat pocket often becomes prominent with age. During a blepharoplasty, a prominent upper eyelid nasal fat pocket can be removed.

Nasojugal groove

This is the meeting point of the lower eyelid with the midface near the nose. It is almost imperceptible in the young but gets prominent with aging as volume loss along the infraorbital rim occurs. Other names are tear trough and nasojugal crease.

Negative vector

A condition where the globe and the lower eyelid is more anterior than the underlying maxillary prominence. Care has to be taken in performing lower eyelid surgery in people with such conditions. Volume augmentation with fat repositioning, fat grafting, or injectable fillers to the underlying midface may have to be performed at the same time as a blepharoplasty.

Non-ablative resurfacing

A minimally invasive method of rejuvenating the skin mostly by use of laser technology. The procedure involves the skin and dermis only.

O

Orbitomalar ligament

A fibrous attachment that runs from the orbital rim to the skin around the lid-cheek area. It is often released during a lower eyelid blepharoplasty prior to performing fat repositioning.

Orbicularis muscle

An important facial muscle that maintain function in eyelid closure. It is innervated by the seventh cranial nerve (facial nerve). During blepharoplasty surgery, the orbicularis muscle is identified and some of the muscle may be removed if there is a redundancy of muscle present.

Orbit

The bony eye socket of the eye, comprised of seven facial bones. The orbit houses the eyeball and its related structures such as orbital fat, extraocular muscles, nerves, vessels, suspensory ligaments and eyelid structures.

Orbital orbicularis

Part of the orbicularis oculi muscle that encircles the outermost perimeter of the eyelid muscle. Its function is to help close the eyelid and voluntary eyelid closure.

It is one of the three parts of the orbicularis muscle: the orbital part, the preseptal, and pretarsal.

Orbital septum

A sheet of connective tissue that encases the deeper structures of the eyelid including the orbital fat pockets. It originates from the orbital bones around the eye socket. During upper and lower blepharoplasty surgery, the orbital septum is identified and dissected to expose the underlying excess fat pockets.

Orbital rim

The anterior edge of the bony orbit, or eye socket. Part of the orbit formed by the superior (upper) and inferior (lower) orbital rims. The frontal bone forms the superior orbital rim, and the maxilla and zygomatic bone form the inferior orbital rim.

Orbicularis suspension

A procedure that can be performed during a lower eyelid blepharoplasty to address redundant skin and muscle. The orbicularis muscle is tightened and resuspended laterally to help improve the appearance of the lower eyelid. It is performed through a direct skin incision approach (transcutaneous).

P

Periorbita

The area within the orbit (eye socket) that contains the periosteum, a fibrous tissue overlying the orbital bone.

Ptosis

A droopy upper eyelid, secondary to a weakened levator muscle. It can be acquired (aging, trauma, intraocular surgery, various medical disorders) or congenital and seen at birth. Ptosis can occur in one eye (unilateral ptosis) or both eyes (bilateral ptosis). When severe enough, ptosis can affect vision. Ptosis surgery can help improve the eyelid position.

Pretarsal show

The area of upper eyelid skin that is visible and located between the eyelashes and the upper eyelid fold. The amount of pretarsal show varies in individuals. Generally speaking, someone with minimal pretarsal show has a low lying eyelid fold.

Pretarsal orbicularis

One of the three components of the orbicularis muscle (orbital, preseptal, and pretarsal), it is located just anterior to the tarsus. Along with the preseptal orbicularis, it is responsible for eyelid closure and blinking.

Preseptal orbicularis

One of the three components of the orbicularis muscle, it is located in between the orbicularis and pretarsal components, just anterior to the septum. Along with the pretarsal orbicularis, it is responsible for eyelid closure and blinking.

Preaponeurotic fat

Intraorbital fat that lies just on top of the levator complex and underneath the orbital septum. It often atrophies with age, but in cases where it is in excess, some of the excess fat can be removed during a blepharoplasty.

Posterior lamella

The posterior set of structures in an eyelid, found behind the middle lamella. The structures that are included are eyelid retractors, tarsus, and conjunctiva. These structures are vital in maintaining structure and function of both the upper and lower eyelids.

Premorbid photographs

These are photographs taken before any onset of the aging process or a disease process. They help the examiner to determine the extent of the problem and the best surgical plan based on photographs taken years prior.

Preperiosteal fat repositioning

A type of dissection technique employed in lower eyelid transconjunctival blepharoplasty in preparation for fat repositioning. The dissection plane is anterior to the periosteum and within the suborbicularis plane.

Puncta

Small openings at the medial edge of each upper and lower eyelid along the lid margin where tears from the ocular surface drain into. The tears then drain from the puncta into the nasolacrimal duct. Puncta can be stenotic or obstructed due to inflammation or other processes, and may require treatment for patency. When blocked, irritation and tearing occurs.

R

Restylane

A brand name for a hyaluronic acid filler used in facial rejuvenation. It is an injectable filler used to improve fine wrinkles and facial volume loss.

S

Skin graft

The use of skin tissue from one part of the body (donor site) to transfer it to help repair open wound defects at another site (recipient site). They are used to repair large defects from trauma, skin cancer, or eyelid reconstructive surgery.

Skin pinch blepharoplasty

A technique that can be performed during a lower eyelid blepharoplasty where a small amount of skin is directly excised through a transcutaneous approach. This is performed in cases where excess skin is identified in a lower eyelid and removed.

Skin muscle flap blepharoplasty

A type of lower eyelid blepharoplasty approach where the excess skin and redundant muscle is directly removed and resuspended to help rejuvenate the lower eyelid. The approach uses a visible incision below the eyelashes through a transcutaneous approach.

Superior sulcal hollowing

A hollowness or recessing of the upper eyelid below the superior orbital rim. It can often give the eye an aged or skeletonized appearance. It can happen from aging process or over resection of the fat pockets in the upper eyelid during a blepharoplasty. Injectable fillers, fat grafting, or surgery can often help improve the condition.

Septal reset

A technique that can be used during a lower eyelid blepharoplasty that can help in repositioning the herniated fat pockets below the infraorbital rim along the lid-cheek junction and midface.

Subperiosteal fat repositioning

A procedure that can be performed during a lower eyelid blepharoplasty to help rejuvenate the appearance of the lower eyelid by repositioning some of the excess fat along the hollow areas below the eyelid (infraorbital rim hollowing). The transpositioned fat is fixated under the periosteum

Supraperiosteal fat repositioning

A procedure similar to subperiosteal fat repositioning but in this case the repositioned fat is fixed above the periosteum. It is analogous to preperiosteal fat repositioning.

Snap back test

A lower lid test to assess its strength and lid tone. A normal resting eyelid should have a quick snap back into normal position once it is manually everted. The slower the eyelid is to spring back, the weaker the lid tone.

Skin excess

Redundant eyelid skin that occurs with aging process, largely due to volume loss and increased thinning of the skin. Blepharoplasty surgery can help improve the excess skin, volume injections (i.e. injectable fillers) can help if the excess skin is due to volume loss.

T

Temporal brow lift

Another term for a lateral brow lift to help elevate the lateral tail of the eyebrows in cases of eyebrow ptosis. The incisions are made in well hidden areas along the scalp in hair-bearing areas. It is a minor procedure that can help provide a natural looking improvement to the eyebrow position by elevating the lateral tail of the brow.

Tarsus

Connective tissue that is found in both upper and lower eyelids, superior and inferior tarsal plates. They help in maintaining the structure and function of the eyelid. The superior tarsus spans up to 10mm in the upper eyelid and the inferior tarsus spans 4mm in the lower eyelid. They are approximately 1 mm in thickness and contains meibomian glands. They are left undisturbed during blepharoplasty surgery.

Transconjunctival blepharoplasty

A technique that rejuvenates the lower eyelid by using an approach that creates a non visible incision. The approach is performed posteriorly (back side of the eyelid) through a conjunctival incision. The prominent fat pockets (eye bags) are identified and removed. Fat repositioning, release of orbitomalar ligament can be performed through this approach.

Transcutaneous blepharoplasty

A technique that addresses lower eyelid aging changes such as prominent fat pockets and excess skin. The approach uses a direct incision below the lower eyelid eyelashes

(transcutaneous approach) to remove the prominent fat pockets and skin. Redundant orbicularis muscle can also be addressed by an orbicularis suspension. The incision made usually heals very well with little signs of scarring. Canthoplasty or canthopexy may have to be performed at the same time.

Tarsal strip canthoplasty

A procedure that helps to tighten, shorten, and to resuspend the lower eyelid to a higher position. It is often used in cases where there is significant lower eyelid laxity and/or malpositions such as an ectropion or entropion. It can be combined with a blepharoplasty surgery when there is a need to tighten the lower eyelid at the same time or repair an eyelid malposition.

Trichloroacetic acid (TCA) chemical peel

A common agent used for skin resurfacing, it can be prepared at various concentrations. TCA peels are commonly performed for facial and eyelid resurfacing. Depending on the concentration and the application methods, TCA can penetrate the skin at varying depths. TCA peels are often performed at the same time during a blepharoplasty to help tighten the eyelid skin and improve some of the wrinkles.

Triamcinolone

A long acting corticosteroid that is used to treat various skin conditions including inflammation and scar tissue. It can be used in patients that have developed some inflammation or scar tissue after plastic surgery.

U

Upper lid blepharoplasty

A cosmetic surgery that is performed on the upper eyelids to help eliminate excess skin and fat pockets. It can be performed in the office under local anesthesia or using mild IV sedation.

Upper lid-brow junction

This is the area between the brow and the upper eyelid crease. The junction can become more hollow or atrophic with age, which is termed superior sulcal hollowing. Injectable fillers or fat grafting can be placed to improve the volume loss in this area.

Upper lid fat compartments

These are fat pads within the upper eyelid that include central (preaponeurotic) and the medial fat pads. With age, the central fat pads often atrophy and result in upper lid hollowing. In contrast, the nasal fat pockets become more prominent. A blepharoplasty can eliminate the herniated upper lid nasal fat pockets.

V

Volume preservation blepharoplasty

Eyelid operation to rejuvenate the upper and lower eyelids where as much as possible skin, muscle and fat are preserved. Fat is often repositioned to address the hollowing (volume loss) along the infraorbital rim which includes the tear trough area. Older techniques mostly employed removal techniques without preserving tissue or repositioning fat pockets.

Voluma

A commercially available highly cross-linked hyaluronic acid gel that is approved for cheek augmentation and age-related facial volume loss. It can also be used in the midface, temples, and chin areas. The filler has properties that allow for a filling and a lifting capability of the tissue.

Visual field

The extent of the area a person can see in the periphery while the eyes are focusing on a central point ahead. People with significant excess skin or ptosis may have decreased visual fields.

W

Whitnall's tubercle

An anatomical landmark on the lateral orbital rim of the zygomatic bone. It is also termed orbital tubercle. The structure is an anatomic landmark identified when performing a canthoplasty or a canthopexy.

Whitnall's ligament

A fibrous condensation running through the levator muscle that acts as a suspensory support for the upper eyelid. It also acts as a fulcrum for the levator muscle helping to transfer the vector force from an anterior-posterior to more of a superior-inferior direction. It is medially attached to the trochlea and superior oblique tendon. Laterally, it forms septae through the lacrimal gland and attaches onto the lateral orbital wall approximately 10 mm above the lateral orbital tubercle.

Wound closure

Suturing or stapling back a surgical incision to improve healing and achieve a desired appearance. Wound closure material and techniques are determined by the site and type of tissues involved.

Wound modulators

These are substances that help to prevent or minimize wounds healing with fibrosis by in part reducing inflammation. Corticosteroids and antimetabolites (such as 5-fluorouracil) are examples of wound healing modulators.

X**Xanthelasma**

Yellowish fatty deposit on the eyelids that may need excision. They occur mostly on the upper and lower eyelids near the medial canthus. There is an association between xanthelasma and elevated cholesterol; people with these lesions must be evaluated for elevated cholesterol.