Lids and Lashes on the Cutting Edge SPENCER D. JOHNSON, O.D., F.A.A.O.

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Eyelid Anatomy

- Common benign and malignant neoplasms
- Cysts
- Chalazia
- Blepharospasm
- Punctal occlusion
- Trichiasis and distichiasis

Eyelid Anatomy

- Orbicularis oculi muscle
- Tarsal plate
- Levator aponeurosis
- Superior tarsal muscle (of Muller)
- Meibomian glands
- Hair follicles
- Glands of Moll
- Glands of Zeiss

Benign Neoplasms

- Squamous cell papilloma (i.e. acrochordon or skin tag)
- Verruca vulgaris
- Seborrheic keratosis
- Actinic keratosis*
- Nevus
- Molluscum contagiosum

*Premalignant

Benign Lesions



Move freely

Don't disrupt the lash line

Squamous Cell Papilloma



Verruca Vulgaris



Seborrheic Keratosis



Seborrheic Keratosis



Actinic Keratosis



http://uacc.arizona.edu/sci/about/ak





Molluscum Contagiosum



Malignant Neoplasms

Basal cell carcinoma

Squamous cell carcinoma



Basal Cell Carcinoma



Squamous Cell Carcinoma



Melanoma
















































Treatment of Neoplasms

Biopsy suspected malignant lesions

Asymmetry

Border





Biopsy Technique

Instill proparacaine in both eyes

Clean area with isopropyl alcohol to prepare for injection

Inject anesthetic

Biopsy Technique

Clean area with povidone-iodine, with particular emphasis on the lids

Confirm anesthesia by grasping the skin with tissue forceps

Excision of specimen

- Punch biopsy generally used for flat lesions
- Westcott scissors generally used for raised lesions
- Place specimen in formalin and send to lab

Excision for Benign Lesions

Instill proparacaine in both eyes

Clean area with isopropyl alcohol to prepare for injection

Inject anesthetic

Excision for Benign Lesions

Clean area with povidone-iodine, with particular emphasis on the lids

- Confirm anesthesia by grasping the skin with tissue forceps
- Excise lesions
 - Wescott scissors
 - Radiofrequency unit
- Apply antibiotic ointment to site of lesion, and prescribe antibiotic ointment for use BID for seven days



Hidrocystoma

 Cyst of Moll (i.e. apocrine sweat gland hidrocystoma, sudoriferous cyst, cystadenoma)

- Translucent
- On anterior lid margin

Eccrine sweat gland hidrocystoma – similar to cyst of Moll, but not confined to the eyelid margin



Cyst of Zeis

- Yellowish in appearance
- Found along eyelid margin

Sebaceous cyst – rarely found on eyelid, may occur at the inner canthus

Treatment of Cysts

Instill proparacaine in both eyes

Clean area with isopropyl alcohol to prepare for injection

Inject anesthetic

Treatment of Cysts

Clean area with povidone-iodine, with particular emphasis on the lids

Confirm anesthesia by grasping the skin with tissue forceps

Make a single linear incision (scalpel or radiofrequency unit) in the cyst respecting the lines of tension of the skin

Treatment of Cysts

Drain contents

- Cyst of Moll contents are watery and will flow out
- Cyst of Zeiss or sebaceous cyst use forceps and apply pressure from the base of the cyst to express contents out of incision

Destroy the capsule

- Tissue forceps and Wescott scissors
- Radiofrequency unit on coagulation mode
- Apply antibiotic ointment to site of lesion, and prescribe antibiotic ointment for use BID for seven days

Xanthelasma

Composed of foamy histiocytes with surrounding local inflammation

Referred to ophthalmology for management

Hordeolum

Internal – infection of the Meibomian gland

External - infection of a gland of Zeiss or Moll

Treatment

- Oral antibiotic
- Warm compresses

Chalazion (Meibomian cyst)

Treatments

Injection

Incision and curettage



Clean area with isopropyl alcohol to prepare for injection

Inject 0.2 to 0.4 cc of Kenalog 40 into each lesion

Instill proparacaine in both eyes

Instill a few drops of Betadine into the eye being treated and leave for 2 minutes

Rinse Betadine with sterile saline

Clean area with isopropyl alcohol to prepare for injection

Inject anesthetic

Clean area with povidone-iodine, with particular emphasis on the lids

Confirm anesthesia by grasping the skin with tissue forceps

- Apply a clamp and evert the lid to expose palpebral conjunctiva
- Make a single vertical incision

Aggressively remove contents with curette, being sure to destroy the capsule

Tobradex ointment BID for 1 week

Blepharospasm

Verify that a hemifacial spasm is not present

Botox injections

- Clean area with isopropyl alcohol to prepare for injection
- Prepare Botox solution according to manufacturer's directions
- Inject 0.05 mL to 0.1 mL volume transdermally at each site
 - Lateral upper lid
 - Medial upper lid
 - Lateral lower lid

Punctal Occlusion

Radiofrequency treatment

Instill proparacaine in both eyes

- Clean area with isopropyl alcohol to prepare for injection
- Inject anesthetic

Punctal Occlusion

Radiofrequency treatment

- Apply 4% lidocaine with a polyvinyl acetal spear sponge (i.e. Weck-Cel sponge) to punctum
- Confirm anesthesia by grasping the skin around the punctum with tissue forceps
- Set the power on the coagulation mode of the radiofrequency unit to 4
- Insert the radiofrequency tip into the punctum and press the foot pedal for 1 or 2 seconds until the tissue constricts and blanches

Disorders of the Eyelashes

Trichiasis – misdirection of the lashes

Distichiasis – growth of lashes from the Meibomian glands

Treatment

Traditional epilation – regrowth in approximately 10 weeks

Radiofrequency follicle ablation – permanently destroys the follicle

Radiofrequency Follicle Ablation

Instill proparacaine in both eyes

Clean area with isopropyl alcohol to prepare for injection

Inject anesthetic along entire lower lid and then roll anesthetic with a cotton-tipped applicator toward lid margin

Radiofrequency Follicle Ablation

Confirm anesthesia by grasping the skin with tissue forceps

Set the power on the coagulation mode of the radiofrequency unit to 2

Insert the radiofrequency tip into the hair shaft and press the foot pedal for 1 or 2 seconds