

Lids and Lashes on the Cutting Edge

SPENCER D. JOHNSON, O.D., F.A.A.O.

Topics

- ▶ Eyelid Anatomy
- ▶ Common benign and malignant neoplasms
- ▶ Cysts
- ▶ Chalazia
- ▶ Blepharospasm
- ▶ Entropion
- ▶ 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

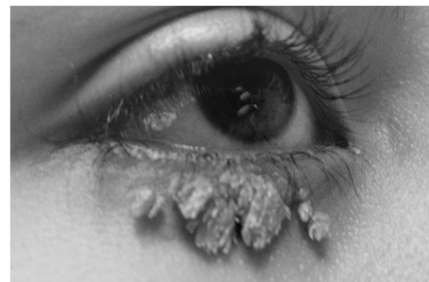
- ▶ Squamous cell papilloma (i.e. acrochordon or skin tag)
- ▶ Verruca vulgaris
- ▶ Seborrheic keratosis
- ▶ Actinic keratosis*
- ▶ Nevus
- ▶ Molluscum contagiosum

*Premalignant

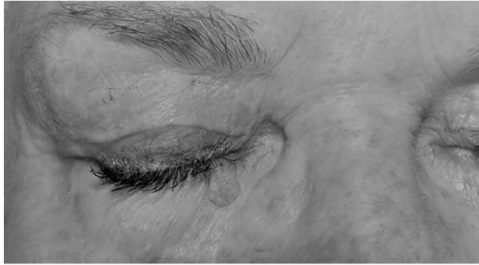
Squamous Cell Papilloma



Verruca Vulgaris



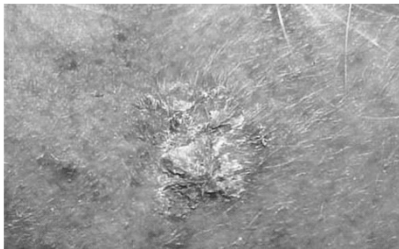
Seborrheic Keratosis



Seborrheic Keratosis



Actinic Keratosis



<http://uacc.alabama.edu/uk/about/ak>

Nevus

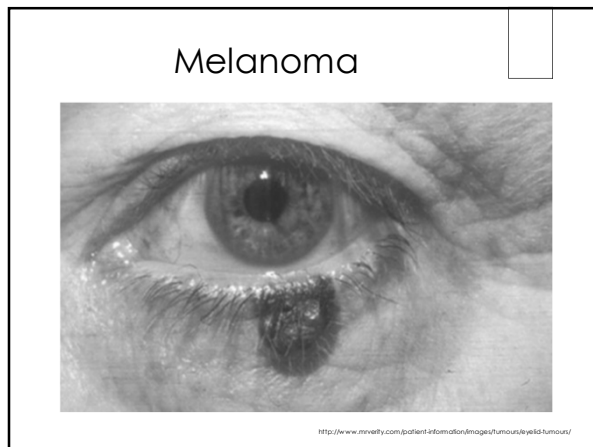
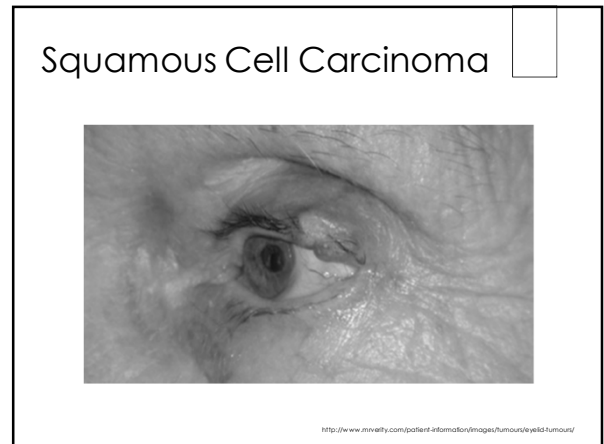


Molluscum Contagiosum



Malignant Neoplasms

- ▶ Basal cell carcinoma
- ▶ Squamous cell carcinoma
- ▶ Melanoma



- ### Treatment of Neoplasms
- ▶ Biopsy suspected malignant lesions
 - ▶ Asymmetry
 - ▶ Border
 - ▶ Color
 - ▶ Duration

- ### 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

Cysts

- ▶ 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

Cysts

- ▶ 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 Westcott 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

Injection

- ▶ Clean area with isopropyl alcohol to prepare for injection
- ▶ Inject 0.2 to 0.4 cc of Kenalog 40 into each lesion

Incision and Curettage

- ▶ 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

Incision and Curettage

- ▶ Clean area with isopropyl alcohol to prepare for injection
- ▶ Inject anesthetic
- ▶ Clean area with povidone-iodine, with particular emphasis on the lids

Incision and Curettage

- ▶ 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

Incision and Curettage

- ▶ 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

Entropion

- ▶ Quickert suture procedure
 - ▶ Instill proparacaine in both eyes
 - ▶ Clean area with isopropyl alcohol to prepare for injection
 - ▶ Inject anesthetic along entire lower lid

Entropion

- ▶ Quickert suture procedure
 - ▶ Instill a few drops of Betadine into the eye being treated and leave for 2 minutes
 - ▶ While waiting, use additional Betadine to clean lids and lashes
 - ▶ Rinse Betadine with sterile saline

Entropion

- ▶ Quicker suture procedure
 - ▶ Apply 4% lidocaine with a polyvinyl acetal spear sponge (i.e. Weck-Cel sponge) to the proposed suture sites along the inferior fornix
 - ▶ Confirm anesthesia by grasping the skin with tissue forceps
 - ▶ Place 3 sutures along lower lid entering, approximately 1 cm apart from each other, in the palpebral conjunctiva as low as possible without catching the bulbar conjunctiva, and exiting approximately 2 mm inferior to the lid margin
 - ▶ Tie off suture

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