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2025
AFOS/SECO
**EDUCATION
DESTINATION**
San Antonio

Course # 115

Lumps & Bumps

Michelle Welch, OD

Please Silence All Mobile Devices.

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2025
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DESTINATION**
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Michelle Welch, OD

Disclosure statements:
No financial relationships to disclose

All relevant relationships have been mitigated.

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Lumps and Bumps:
In Office Optometric Lid Procedures

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 **Choctaw Nation**
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Malignant Tumors of the Eyelids

"Pearls"

- Most periocular tumors are derived from epidermis or adnexae
- Main goal – rule out malignancy
- Identify characteristics of malignancy (HABCDs)
- BIOPSY ALL SUSPICIOUS LESIONS!



BCC

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Epithelial Malignancies

Basal cell carcinoma

- Most common malignancy of the eyelid (90%+)
- Types
 - Nodular
 - Ulcerative
 - Sclerosing, morpheaform

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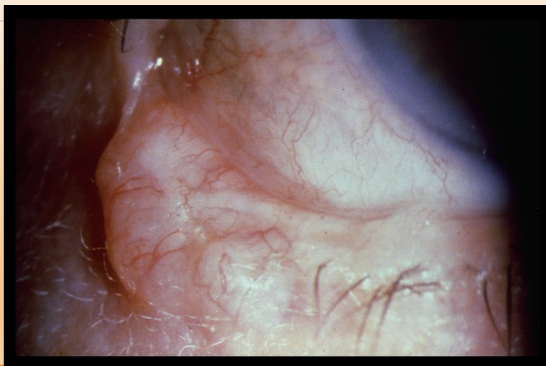
Basal Cell Carcinoma

Rarely metastasize

- Medial canthal area most dangerous
- Mortality rate unknown, quoted 1-3%
- Orbital invasion
 - Iowa series (1992) 1.7%
 - Mayo clinic series 2.4%
 - Exenteration necessary 1.4 – 3.8% of cases

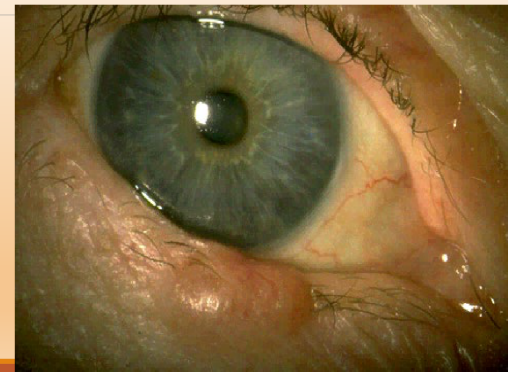
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BASAL CELL CARCINOMA

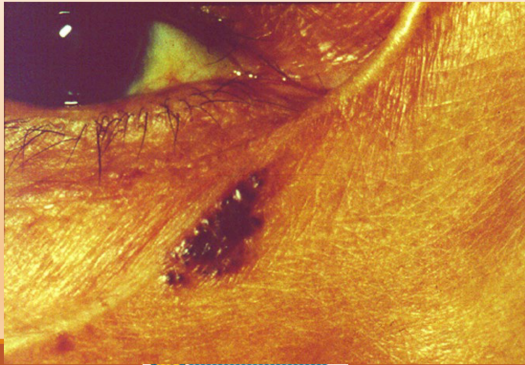


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Nodular Basal Cell Carcinoma



PIGMENTED BASAL CELL



Ulcerative Basal Cell Carcinoma



Epithelial Malignancies

Squamous cell carcinoma

- Relatively rare, Wilmer series 4.2% (Doxanas 1987)
- Small tendency to metastasize (0.23 – 0.25%)
- Frequently misdiagnosed clinically

Squamous Cell Carcinoma

Confused with:

- Sebaceous cell carcinoma, basal cell carcinoma
- Seborrheic keratosis, inverted follicular keratosis, papilloma
- If rapid onset and inflammation present, think of:
 - Keratoacanthoma, pseudoepitheliomatous hyperplasia

Squamous Cell Carcinoma



Squamous Cell Carcinoma



Characteristics of Pigment Cell Malignancy (Melanoma)

- New onset or recent change
- Asymmetric shape
- Irregular margins
- Color change or multiple colors
- Large size - > 5mm

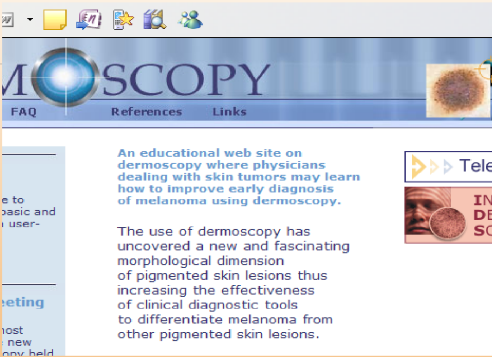
MALIGNANT MELANOMA



Pigmented Lesions



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DERMOSCOPY

Home E-mail FAQ References Links

different structures, the higher the probability of the melanoma.

ABCD rule of dermoscopy (Modified according to St. John)

Criteria	Description
Asymmetry	In 0, 1, or 2 axes: assess not only contour, but also colors and structures
Border	Abrupt ending of pigment pattern at the periphery in 0-3 segments
Color	Presence of up to six colors 1-6 (white, red, light brown, dark brown, blue-gray, black)
Differential structures	Presence of network, structureless or homogeneous areas, streaks, dots, and globules

Formula for calculating TDS:
$$[(A \text{ score} \times 1.2) + (B \text{ score} \times 0.5) + (C \text{ score} \times 0.5) + (D \text{ score} \times 0.5)]$$

Total Dermoscopy Score (TDS)	Interpretation
<4.75	Benign melanocytic lesion
4.8-5.49	Suspicious lesion: close follow-up or excision recommended
>5.49	Lesion highly suspicious for melanoma

False-positive score (>5.49) sometimes observed in:

- Reed and Spitz nevi
- Clark nevus with globules
- Congenital melanocytic nevi
- Melanocytic nevus with structureless areas

References

1. Kreusch J, Rasmann G. Standardisierte auflichtmikroskopische Unterscheidung melanocytischer und nichtmelanocytischer Hautläsionen. *Hautarzt* 1991;42:177-83.

DERMOSCOPY

Home E-mail FAQ References Links

1 Step Introduction

2 Step Dermoscopic criteria

- Global features
- Local features
- Pigment network
- Dots and Globules
- Streaks
- Blue-white veil
- Pigmentation
- Regression structures
- Vascular structures
- Other Criteria

3 Step The striking aspect of this globular Clark nevus is the dark brown gray color of otherwise regular dots/globules in the lower left part of the lesion

4 Step At the periphery of this melanoma, several irregularly shaped dots/globules can be noted

5 Step Numerous dots/globules of various sizes and shapes are present in the upper part of this melanoma

6 Step Summary

Differential Diagnosis



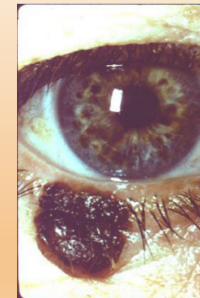
Pick your lesion carefully!



Pick your lesion carefully!



Pick your lesion carefully!



Excision with Radiofrequency

Advantages of Radiosurgery

- Quick and easy (to do and to learn)
- Nearly bloodless field
- Minimal Post-op pain
- Rapid healing
- Fine control with variety of tips
- No muscle contractions or nerve stimulation from radiowaves (Faraday effects)



Contraindications

Do NOT perform shave excision on pigmented lesion unless certain is not melanoma!!!

Don't use in presence of flammable fumes/liquids

Pacemaker

- "Do not work near the heart and place the antenna (or grounding) plate well away from the heart. Use the least power possible. Activate the handpiece intermittently rather than continuously. The cutting mode is the most risky, so avoid it if possible. Use another form of treatment if it is an option. The pacers are purportedly "shielded" and the current in the ESUs should not affect them, but all things are not perfect! Therefore caution is needed. Asystole and tachycardia are potential adverse outcomes."

• Pfenninger and Fowler's Procedures for Primary Care, 3rd Edition. John L. Pfenninger, MD, FAAP and Grant C. Fowler, MD



<https://vimeo.com/1100286278/24b0e078e8>



Epithelial inclusion cyst video

[HTTPS://VIMEO.COM/1100286002](https://vimeo.com/1100286002)

Informed Consent

- Indications for treatment
- Description of treatment in layman's terms
- Alternatives to treatment
- Risks and benefit of treatment
- Expected and unexpected outcomes
- Patient must request procedure



Units I have used/have experience with

Pre-Operative Activities

- check patient allergies
- check vital signs (pulse, respiration, BP)
- informed consent
- handling patient fear
- set up equipment
- Inspection of equipment
- Inspection of medication - discard if cloudy, expired, or container damaged
- Photodocument lesion

Procedure Technique

Pre-op (photos, consent, BP and Pulse, VA)

Anesthetize (infiltrative usually)

Clean area, drape if needed

- Betadine needs 3 mins on skin!

Turn on Ellman unit: warm up for at least 30 seconds

Choose appropriate waveform

Choose initial power setting (will often need to adjust depending on tissue response to energy level chosen)

Procedure Technique

Have assistant turn on/position vacuum unit– USE vacuum and masks!

- Have isolated HPV and HIV in smoke

Place yourself in comfortable/stable position to do procedure

Brace your handpiece wrist on patient for stability

Procedure Technique

Electrode tip should be applied perpendicularly to allow even distribution of energy

Press footplate activator when ready to begin procedure

Move in expeditious but controlled fashion: always keep electrode moving when contacting tissue

Procedure Technique

Keep surgical site moist (saline gauze) to avoid tissue drag; also wipe energized tip to remove tissue stuck to it

For removing mass lesions, use loop electrode/grab with opposite hand forceps/have specimen jar ready for lab submission

When feathering down a lesion with a loop, keep perpendicular--remove until healthy tissue seen (particularly helpful with lesions on gray line)

Can use forceps closed tips to touch end of area of bleeding, touch electrode to forceps to transfer energy to area to stop bleeding

Procedure Technique

Clean area of betadine

Apply antibiotic ung

Don't let patient jump and run as you sit them up!

Blood pressure and pulse post-op

Write op report in chart along with patient instructions on wound care and follow-up schedule

Chalazia Management Options

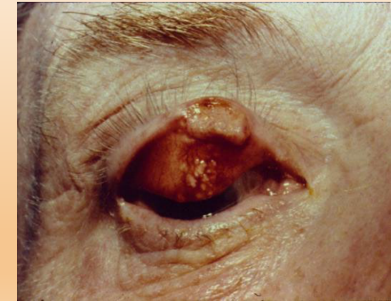
Give each patient all options for treatment!

- Conservative Approach
 - Hot compress with digital massage
 - Can add Doxycycline if not contraindicated
- Intralesional Steroid Injection
- Incision and Curettage

Differential Diagnosis

Sebaceous Gland Carcinoma

- Must r/o in any recurrent chalazion
- May be lash loss
- Appearance can be varied – be cautious



Conservative Approach

Indications

- Small lesion (< 6 mm)
- Less present less than 6 months
- Lesion in medial aspect of lid where would not want to perform I & C
- Patient choice of treatment

Contraindications

- Doxycycline allergy, liver and/or kidney dz

Risks and Complications

- No resolution of lesion

Intralesional Steroid Injection

Indications

- Over 6 months old
- Large (4 – 6 + mm)
- Located in medial aspect of lid (won't be able to do I & C)
- Patient choice

Contraindications

- Allergy/sensitivity to steroid

Risks and Complications

- Depigmentation
- Infection
- No resolution of lesion

Intralesional Steroid Injection Technique

Multiuse Vial

- Alcohol top
- Put air in syringe
- Push air into vial
- Load syringe with med
- Alcohol top of vial
- Dilute kenalog 40 to 20 or 10

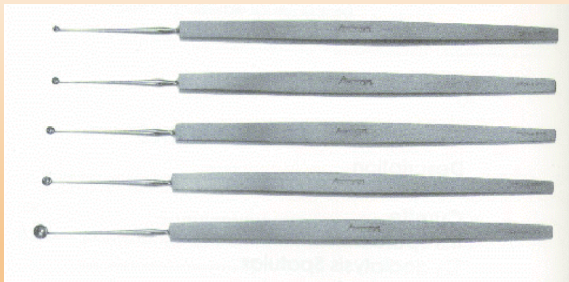


Instruments



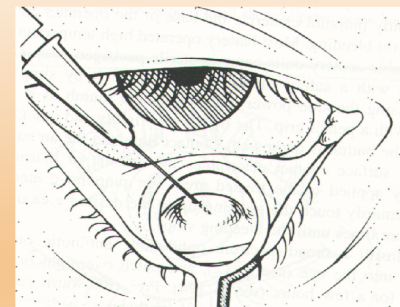
Chalazion Clamp

Instruments

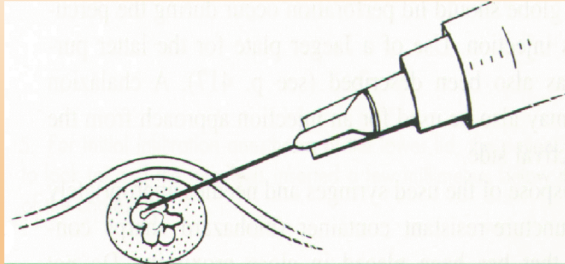


Curette

Intralesional Steroid Injection Technique



Intralesional Steroid Injection Technique



Chalazion Incision and Curettage

Indications

- Same as for injection plus:
- Failure of injection to resolve lesion

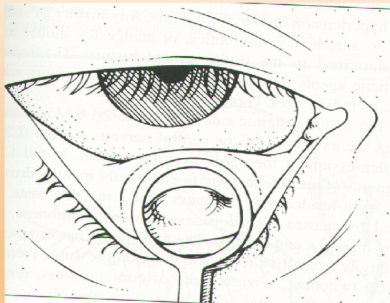
Contraindications

- Allergy/Sensitivity to anesthetic

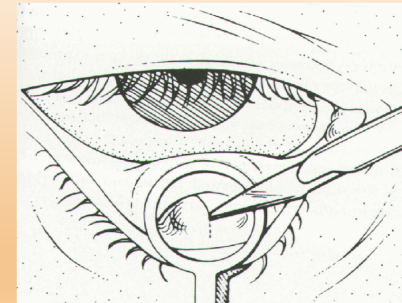
Risks and Complications

- Incomplete removal
- Infection
- Risks associated with injection of anesthetic
- If recurs in same spot will need biopsy could be sebaceous gland carcinoma!

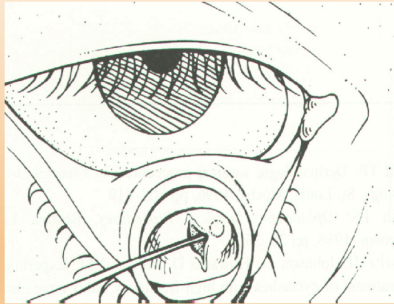
Chalazion Incision and Curettage



Chalazion Incision and Curettage



Chalazion Incision and Curettage



Chalazion #1 video

<https://vimeo.com/1100282107?share=copy>



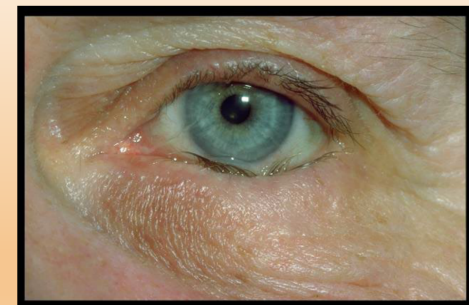
Chalazion #2 Video

<https://vimeo.com/1100282171?share=copy>

Entropion

Inward turn of eyelid – usually lower lid

For mild entropion, repair by suture is a viable option



Quickert Suture Technique

Entropion Repair by Suture Video

<https://vimeo.com/1100282207?share=copy>

BLEPHAROSPASM

- The initial recommended dose is 1.25 Units to 2.5 Units (0.05 mL to 0.1 mL volume at each site). The recommended dilution to achieve 1.25 Units is 100 Units/8 mL; for 2.5 Units it is 100 Units/4 mL.¹⁶
- The cumulative dose of BOTOX® treatment for Blepharospasm in a 30-day period should not exceed 200 Units¹⁶
- Reconstituted BOTOX® is injected using a sterile, 27- to 30-gauge needle without electromyographic guidance¹⁶
- Avoiding injection near the levator palpebrae superioris may reduce the complication of ptosis¹⁶
- Avoiding medial lower lid injections may reduce the complication of diplopia. Ecchymosis can be prevented by applying pressure at the injection site immediately after injection¹⁶
- Initial effect of the injections is generally seen within 3 days and reaches a peak 1 to 2 weeks posttreatment. Each treatment lasts approximately 3 months, following which the procedure can be repeated¹⁶
- At repeat treatment sessions, the dose may be increased up to two-fold if the response from the initial treatment is considered insufficient, usually defined as an effect that does not last longer than 2 months. However, there appears to be little benefit obtainable from injecting more than 5 Units per site. Some tolerance may be found when BOTOX® is used in treating Blepharospasm if treatments are given any more frequently than every 3 months, and it is rare to have the effect be permanent¹⁶

Orbicularis oculi

Muscle action

Closes eyelids; palpebral part closes lids gently; orbital part closes lids tightly¹⁶



BOTOX INJECTION SITES MEDICALLY NECESSARY FOR BLEPHAROSPASM



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BOTOX BLEPHAROSPASM TREATMENT RECORD

646112 Chemodenervation of musculus (10; musculus) innervated by facial nerve, unilateral (ing., for blepharospasm, hemifacial spasm)

G24.5 Blepharospasm _____ RT _____ LT _____

NDC NO. 00023-1145-01 (3 VIAL = 100 UNITS)

AMT Diluent= 2.5 units per 0.1 mL

SEE CHRT FOR VISIT NOTES

DATE OF SERVICE: _____

LOT #: _____

① = 2.5 UNIT INJECTION

② = 1.25 UNIT INJECTION

OD: TOTAL UNITS _____

OS: TOTAL UNITS _____

TOTAL UNITS INJECTED _____

TOTAL UNITS WASTED _____



PATIENT NAME: _____ HINW _____ DOB: _____

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Consent for Use of Botox

Indications: HEMIFACIAL SPASM / BENIGN ESSENTIAL BLEPHAROSPASM

Alternatives: Observation Medication Surgery on facial nerves/muscles

Botox is a brand name for botulinum toxin type A, a neurotoxin that blocks messages between muscles and the nerves that control them. The effects of Botox become apparent 2-5 days after injection and generally last for 3-6 months. The FDA has approved the use of Botox to treat facial dystonias (spasms).

Side effects and complications include but are not limited to:

1. Bruising
2. Undercorrection (not enough effect) or overcorrection (too much effect)
3. Facial asymmetry (one side looks different than the other)
4. Paralysis of a nearby muscle leading to: droopy eyelid, double vision, inability to close eyes, difficulty whistling or drinking from a straw
5. Generalized weakness
6. Permanent loss of muscle tone with repeated injection
7. Flu-like syndrome or respiratory infection
8. Nausea or headache
9. Development of antibodies to Botox
10. Botox contains human-derived albumin and carries a theoretic risk of virus transmission.

There have been no reports of disease transmission through Botox.

Contraindications

You should not have Botox if you are pregnant; nursing; allergic to albumin (eggs); have an infection, skin condition, or muscle weakness at the site of the injection; or have Eaton-Lambert syndrome, Lou Gehrig's disease, or myasthenia gravis.

I understand the above, and have had the risks, benefits, and alternatives explained to me. No guarantees about results have been made. I give my informed consent for Botox injections today as well as future treatments as needed.

_____ Patient Name (print)	_____ Patient Signature	_____ Date
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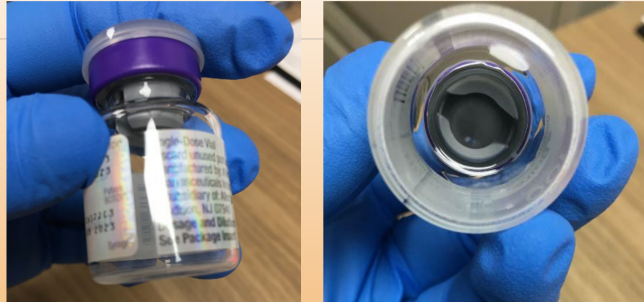
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	ADMINISTRATION GUIDE BOTOX® BOTULINUM TOXIN (onabotulinumtoxinA) for injection, for intracavitary, intradermal, or intradural use
What is the most important information I should know about BOTOX and BOTOX Cosmetics?	BOTOX and BOTOX Cosmetics may cause serious side effects that can be life threatening, including:
• Spread of toxin effects	• Problems breathing or swallowing
These problems can happen hours, days, to weeks after an injection of BOTOX or BOTOX Cosmetics. Call your doctor or get medical help right away if you have any of these problems after treatment with BOTOX or BOTOX Cosmetics.	• Problems breathing or swallowing. These problems can happen hours, days, to weeks after an injection of BOTOX or BOTOX Cosmetics usually because the muscles that you use to breathe and eat can become weak after the injection. Death can happen as a result. People who have severe problems with breathing or swallowing after treatment with BOTOX or BOTOX Cosmetics:
• People with certain breathing problems may need to use machines in their home to help them breathe. These people may need to use a special device to breathe problems after BOTOX or BOTOX Cosmetics.	• People who have severe problems with breathing or swallowing after treatment with BOTOX or BOTOX Cosmetics may need to have surgery to help them breathe.
Spread of toxin effects. In some cases, the effect of botulinum toxin may affect areas of the body other than those that were injected. Symptoms of a widespread condition called botulism:	• Problems with breathing or swallowing. These problems can happen hours, days, to weeks after you receive an injection of BOTOX or BOTOX Cosmetics.
These symptoms could make it unsafe for you to drive a car or other dangerous activities. See "What should I avoid after receiving BOTOX or BOTOX Cosmetics?"	• Problems with breathing or swallowing. These problems can happen hours, days, to weeks after you receive an injection of BOTOX or BOTOX Cosmetics.
There has not been a confirmed serious case of spread of toxin effects after the injection site when BOTOX or BOTOX Cosmetics were used as directed. However, severe side effects have been seen with BOTOX or BOTOX Cosmetics, in which BOTOX Cosmetics have been used at the recommended dose to	There has not been a confirmed serious case of spread of toxin effects after the injection site when BOTOX or BOTOX Cosmetics were used as directed. However, severe side effects have been seen with BOTOX or BOTOX Cosmetics, in which BOTOX Cosmetics have been used at the recommended dose to

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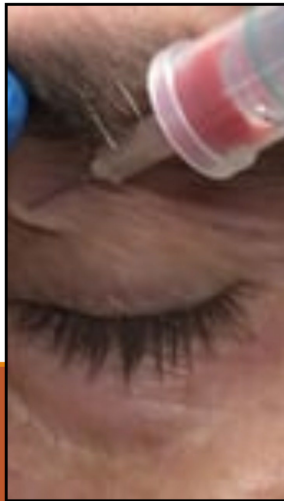
Slide 61



Slide 62



Slide 63



Botox video

<https://vimeo.com/1100281281?share=copy>

Slide 64



Patient Education

May be small amount of bruising

- Can use ice pack if needed

Pain Relief

- Use same meds use to alleviate headache

Keep area clean and dry

- Don't wash for 24 hrs
- No make up, lotions, powders for 5 – 7 days

Use medication as directed

- Usually topical antibiotic ung
- Thin film over area for 4 – 5 days
- Keep moist – don't want hard dry scabs



Patient Education

Watch for signs of infection

As scab forms, don't rub, scrub or pick– keep moist. Don't use agents that will dry it - alcohol, peroxide, etc.

Discuss suture removal timeline

Limit exposure to sunlight

Long term moisturizer use (with spf)



PROCEDURE CODES

Approximate Allowables 6/2025:

	<u>AOA CODING TODAY</u>
◦ 67840 Total Exc lid lesion	\$264.59
◦ 67810 Biopsy/Part Exc lid lesion	\$174.99
◦ 11200 Removal <16 skin tags	\$90.25
◦ 11310 Shave Exc < .5 cm	\$110.30
◦ 11900 Chal injection	\$55.64
◦ 67800 Chal I & C	\$125.18
◦ 67801 Chal Mult S Lid	\$157.85
◦ 67805 Chal Mult D Lid	\$196.67
◦ 67921 Repair of entropion, suture	\$454.14
◦ 64612 Botox for blepharospasm	\$134.24

