"Lumps and Bumps"
Evaluation of lid lesions

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Clinical Relevance
- 5 – 10% of all skin cancers occur in the eyelid
- Accuracy of skin cancer diagnosis by clinicians

<table>
<thead>
<tr>
<th></th>
<th>Dermatology</th>
<th>Ophthalmologists</th>
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</thead>
<tbody>
<tr>
<td>Sensitivity</td>
<td>92%</td>
<td>69%</td>
</tr>
<tr>
<td>Specificity</td>
<td>99%</td>
<td>94%</td>
</tr>
<tr>
<td>False Positive</td>
<td>0.6%</td>
<td>5.5%</td>
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Common Benign Lesions
Characteristics of Benign Lesions
- Symmetry of lesion
- Regular borders
- Does not cause bleeding
- Does not cause loss of lashes

urban legend
Noun: a modern story of obscure origin and with little or no supporting evidence that spreads spontaneously in varying forms and often has elements of humor, moralizing, or horror: Are there alligators living in the New York City sewer systems, or is that just an urban legend?
Most Common Malignant Lesions
- Basal Cell Carcinoma (BCC)
- Squamous Cell Carcinoma (SCC)
- Sebaceous Cell Carcinoma (Seb)
- Malignant Melanoma (MM)

Clinical Appearance
- Pearly raised nodule
- Central ulceration
- Superficial telangiectatic vessels
- May be pigmented in dark skinned patients

Natural History

Basal Cell Carcinoma
- Lower eyelid most common
- Middle age
- Fair skin
- Nodular is most common (75%)
- Limited ability to metastasize
Squamous Cell Carcinoma

- More frequent on lower lid
- Metastasis in 2 – 5% of cases
- Most common >60 age group
- Strong correlation with sun exposure

Clinical Appearance

- No pathognomonic feature
- Painless nodular or plaque like lesion
- May have a scaly appearance
- Irregular borders with telangiectasia

Natural History

Sebaceous Gland Carcinoma

- More common in women
- Average age 68 y.o.
- Metastasis in 17 – 28% of cases
- May demonstrate pagetoid spread

Clinical Appearance

- The great masquerader
- May be misdiagnosed as chalazion, nevus or BCC
- May present as unilateral blepharitis with madarosis

Natural History
Malignant Melanoma
- Relatively rare
- Leading cause of death from primary skin tumors
- Tumors less than 0.75mm in thickness have an excellent survival rate

Clinical Appearance
- Irregular notched borders
- Tan, black or gray lesions
- May have a blue black color with a spherical configuration
- Typically elevated above the level of the surrounding skin

End Stage

Available Treatments
- Moh's surgery
- Excision with frozen-section control
- Photodynamic therapy
- CO2 laser
- Radiotherapy
- Chemotherapy
- Cryotherapy
- Retinoids
- Interferon

Five year Recurrence Rate for BCC (1945 – 1989)

<table>
<thead>
<tr>
<th>Method of treatment</th>
<th>Primary BCC</th>
<th>Recurrent BCC</th>
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<tbody>
<tr>
<td>Cryotherapy</td>
<td>8 %</td>
<td>13 % (&lt; 5 yrs)</td>
</tr>
<tr>
<td>Excision</td>
<td>10 %</td>
<td>17 %</td>
</tr>
<tr>
<td>Radiation</td>
<td>9 %</td>
<td>10 %</td>
</tr>
<tr>
<td>All non-Mohs modalities</td>
<td>9 %</td>
<td>20 %</td>
</tr>
<tr>
<td>Mohs surgery</td>
<td>1 %</td>
<td>6 %</td>
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**Chalazion**
Warm compresses and lid scrubs don’t always work

**Is this a chalazion?**
- Is it in the vicinity of the tarsus?
- Time of onset?
- Pain?
- Does the patient fit the demographics?
Foreign Body
- 8% of foreign bodies are found in men
- 68% of foreign bodies age 15 – 59
- 3% of foreign bodies age >75
- History is the most important part of exam
- MRI contraindicated

Lacrimal Gland Lesions
- Can often be seen through the eyelid
- Eversion of the eyelid will allow visualization of the palpebral lobe
- Inflammatory vs Neoplastic
  - Take note of characteristics
  - Does it hurt?
  - Is it growing?
  - Texture?
  - Attached to underlying structures?
  - Rate of onset?
Canaliculitis
- Recurrent
- May improve with topical antibiotics but not curative
- Actinomyces species most common
- Cast forming Gram-positive anaerobe
- Difficult to culture
- Difficult to treat
- Incision and curettage followed by oral PCN

Systemic diseases
- Conjunctival involvement ~ 20% association with systemic disease
- Orbital involvement ~ 35% association with systemic disease
- Eyelid involvement ~ 67% association with systemic disease
Other lumps

Lesions attached to the bone
- Dermoid cyst
- Pilomatrixoma
- Fibrous Dysplasia
- Meningioma
- Metastatic lesions (Prostate & breast)

Evaluation
- Texture?
- Adherent?
- Change is size or shape?
- Patient demographics
- Other systemic disease?
- Imaging studies

Benign or malignant on imaging
- Round, oval or irregular?
- Hyperostosis?
- Fat stranding?
- Heterogenous
- Bony erosion?
- Homogenous?
Age <60
Our medial wall is ENT's lateral wall
Our roof is Neurosurgery's floor

Don’t forget the neighbors

Warm compresses with no improvement
Injected with steroids – no improvement
Oral doxycycline – no improvement

Quiz #1
50 yo treated for a chalazion for 8 months.
Warm compresses with no improvement
Injected with steroids – no improvement
Oral doxycycline – no improvement
What is this?

- A. This is a chalazion
- B. This is most likely a benign lesion of the orbit
- C. This is most likely malignant lesion of the lacrimal gland
- D. This is extending from the frontal sinus
- E. This is most likely a metastasis

A, b or c would be ok, I’m just curious what people will think.

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**Quiz #2**

82 yo woman with a chalazion of the right upper eyelid
Warm compresses no improvement
Erythromycin ointment TID with no improvement
PMHx:
- Colon CA
- Squamous Cell CA
- Melanoma
- Breast CA

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What is this?

- A. Chalazion
- B. Metastasis from another location
- C. New primary lacrimal gland lesion

Answer: B. Metastasis from another location
45 yo woman with exophthalmos. She has seen 5 ophthalmologists. Diagnosed with thyroid eye disease. No pain, no discomfort. No weight loss, no tremors, no anxiety. TFT's all WNL.

**Quiz #3**

- A. This is Thyroid Eye Disease. No further intervention required
- B. Exophthalmos of any etiology requires an imaging study

**Correct answer:** B

**Appropriate next step**

- A. This is Thyroid Eye Disease. No further intervention required
- B. Exophthalmos of any etiology requires an imaging study

**Correct answer:** B

**Key points to avoid becoming an “urban legend” of ophthalmology**

- KNOW the anatomy
- If you’re diagnosis doesn’t make sense you must investigate further
- If you’re treatment isn’t working you must investigate further
- Don’t be trapped by the Emperor’s New Clothes
- If you want to find it, you have to look for it

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