Pimple Popper, MD
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Why Oculoplastics? What is MOHS surgery?

- MOHS surgery is performed by a dermatologist and involves serial excision of a lesion with frozen section control.
- The patient is then sent to a reconstructive plastic surgeon for repair of the resultant defect, usually the next day.
- An oculoplastic surgeon perform the excision with frozen section control AND reconstruction in one surgery.
- Aside from the obvious psychological and convenience benefit to the patient, reconstruction can be more successful when the surgeon is considering his/her reconstructive options when performing the resection.
Background

- The good news
  - the large majority of eyelid tumors are benign

- The bad news
  - Patient fear
    - Patients frequently don’t want to acknowledge new lesions
  - Doctor denial
    - tumors that are malignant often masquerade as benign lesions or conditions
    - No one wants to give bad news. We want to assume the best for our patients.
Objective

- To raise our collective level of suspicion for lesions of the eyelids and face
Background

- Basal cell carcinoma is the most common eyelid malignancy
- Other common malignant tumors squamous cell carcinoma, sebaceous cell carcinoma, and malignant melanoma
- A thorough knowledge of the clinical characteristics and behavior of these common malignancies is essential in caring for our patients
Less Common Malignant Tumors

- Mucoepidermoid carcinoma
- Lymphoma
- Metastatic tumors
- Fibrosarcoma
- Merkel cell tumor

- Sweat gland carcinoma
- Malignant trichoepithelioma
- Karposi sarcoma
- Aberrant lacrimal gland carcinoma
History

- Duration
- Bleeding
- Discharge
- Change in size
- Change in color
- Smoking
- History of sun exposure
- History of skin cancer
Exam

- Skin changes
- Size
- Color
- Lash loss
- Lid architecture
- Lymph nodes

- Not all malignant eyelid tumors present as distinct or obvious lesions...
Exam

- “Masquerade syndromes”
  - Malignant eyelid tumors presenting as inflammatory processes
  - Neoplastic lesions may invade tissue planes not readily visible

![Cat with Batman mask](image)
Characteristics of Maligancy

- Ulceration
- Induration
- Irregularity
- Pearly borders
- Slow growth
- Loss of eyelid margin architecture
- Lash loss
- Telangiectasia
- Bleeding
Basal Cell Carcinoma
BCC - Background

- 20% of all eyelid neoplasms
  - 90% of all malignant eyelid neoplasms

- Demographics:
  - Middle-aged, light complexion
  - Sun exposure (25% higher UV in Denver)

- Lower lid, medial canthus

- Spread by local invasion (almost exclusively)
BCC - Types

- Nodular
  - Pearly “Rodent ulcer”
  - Papule progressing to central depression, rolled edge

- Morpheaform
  - Scleroderma-like with roughness and contracture
  - Insidious with spread beyond clinical margins

- Superficial spreading
  - Plaques for rough erythema
  - Usually multicentric
BCC - Noduloulcerative

- Pale, elevated margins
- Nodular with telangiectatic vessels
- Necrotic, ulcerated center
BCC - Morpheaform

- Indistinct margins
- Smooth, leathery surface
- Extend for a considerable distance beyond their clinical margins
- Cicatrization of surrounding tissues
BCC - Superficial

- Relatively rare on the face
- Slightly elevated, erythematous, scaly patches
BCC - Spread

- No metastatic activity under normal circumstances
  - Does NOT travel along nerves, blood vessels, or lymphatics
  - Only local invasion

- Excise BCC under frozen-section control
Squamous Cell Carcinoma
SCC - Background

- 2nd most common eyelid malignancy
- 5-10% of all eyelid malignancy
- Demographics
  - Older population
  - Fair complexion, sun damage
- Intraepithelial spread, neural spread, or deep invasion with potential rare regional lymph node metastasis
SCC - Skin

- Can arise de novo or from preexisting lesion
  - Actinic keratosis or h/o XRT
- Typically found on the lower eyelid margin
- Bowens disease – solitary lesion, confined to epithelium (carcinoma in situ)
- Erythematous, elevated, and scaly
Squamous Cell Ca
SCC - Cutaneous

- Older, fair complexion, with h/o sun exposure
- Appearance:
  - Rough, scaly patch +/- ulceration
  - Nodular plaque on margin
  - Chronic dermatitis
- May arise de novo or from keratosis
- More common LL, predilection for margin
- Regional metastasis rate 15-20%
SCC - Spread

- Intraepithelial and infiltrative deep
- Regional lymph node metastasis
- Excision with wide margins and frozen section
- Consider enucleation or exenteration
Sebaceous Cell Carcinoma
Sebaceous Carcinoma - Background

- 3rd most common eyelid malignancy
- 1-5% of all eyelid malignancy
- Demographics:
  - Age >60
  - Fair complexion
  - Unrelated to sun exposure
- Pagetoid / multicentric spread
Sebaceous Carcinoma

- Upper lid >> lower lid
- Most commonly arises from meibomian gland
  - May arise from Zeiss, hair follicle, sebaceous
- Presents as benign inflammatory condition such as chalazion or chronic blepharitis
- Loss of eyelashes are typical
Sebaceous Carcinoma

- This lesion is rare, presents posteriorly, insidiously, as a benign-appearing inflammatory lesion
- Thus, requires a high index of suspicion to diagnose this condition early enough to save the patient’s life
Sebaceous Cell Ca
Sebaceous Carcinoma - Spread

- Local infiltration
- Commonly multicentric
- Pagetoid (50-70%)
- Regional lymph node metastasis (20-30%)
- Significant mortality
- High recurrence rate
- High incidence of secondary malignancies

Cure?...
Sebaceous Carcinoma – “Cure”
Sebaceous Carcinoma – disease course & management

- Delay to diagnosis
  - Rare lesion which resembles benign inflammation

- Correlation: time to excision and survival, Rao et al
  - Duration <6 months $\rightarrow$ 14% mortality
  - Duration >6 months $\rightarrow$ 38% mortality

- Management
  - Map biopsies
  - Excision with wide surgical margins (6mm)
  - Ultimately, exenteration
Malignant melanoma
Malignant Melanoma - Background

- 4th most common eyelid malignancy
- MM rarely primarily involves the eyelids
  - MM often spills over from the cheeks
  - MM often spills over from the conjunctiva

- Spreads via direct invasion, lymphatics, or vascular system
Cutaneous Melanoma - Types

1. Lentigo maligna melanoma

2. Superficial spreading melanoma

3. Nodular melanoma
Melanoma
Cutaneous Melanoma - Classification

- Level I – in situ (0%)
- Level II – papillary dermis (2.5%)
- Level III – upper reticular dermis (20%)
- Level IV – reticular dermis (40%)
- Level V – subcutaneous tissue (fat) (70%)
Cutaneous Melanoma - Management

- Main prognostic indicator is tumor thickness
- Wide local excision (10mm)
- Adjunctive chemotherapy
- Local node biopsy
- Chest radiograph
- Liver scan
- LFTs
Melanoma - Review

- **Cutaneous**
  - Growth, variable pigmentation, irregular margins
  - Aggressive: direct spread, lymphatics, vascular
  - Clarke levels define propensity for metastasis
  - Aggressive surgical management
  - Collaboration with oncology for systemic work-up
Metastatic Eyelid Carcinoma
Metastatic Eyelid Carcinoma

- Diagnosis is critical because it may be the first sign of an occult malignancy

- Usually presents one of three ways:
  - Solitary eyelid nodule (65%)
  - Diffuse eyelid induration (25%)
  - Ulcerative lesion (10%)

- Etiology:
  - Breast (65%)
  - Lung (15%)
  - Stomach (10%)
Masquerade Presentations of Eyelid Malignancy
Masquerade Presentations

- Many eyelid tumors spread in a manner that involves different tissue planes at a microscopic level.
- As a result, the process does not present as a discrete lesion and is often misdiagnosed as a benign inflammatory lesion.
Chronic Conjunctivitis

- “The patient is non-compliant”
- “I haven’t found the right drop yet”
- “It gets better for a while on steroids, but it keeps coming back”
Chalazion

- Recurrent chalazion, same / multiple locations
Dermatitis

- Allergic dermatitis, contact dermatitis, chronic eczema, scleroderma
Ectropion

- Cicatricial LL ectropion, LL retraction
Entropion

- Senile entropion, trachoma, OCP
Blepharitis

- “Non-compliant patient, poor hygiene”
45 yo WF

Small (<25% of the margin) RLL lesion with some subtle features of a BCC.
In order to get clear margins, we lost >50% of the lower lid.
Create a tarsoconjunctival flap from the underside of the upper lid.

Suture this flap of tarsus into the 50% lower lid defect.
Bring a flap of muscle superiorly to cover the tarsoconjunctival flap.

Cover the whole thing with a third layer—a skin graft taken from the upper lid.
One week after surgery, the newly constructed lower lid is still connected to the upper lid (so that it has a blood supply). Three weeks after surgery we divide the flaps in the office.
Let’s raise our collective level of suspicion

"Doctor, I have a suspicious looking mole on my shoulder."
Thank you!!!!

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