# Periocular Malignancies

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**Description:** This presentation explores the diagnosis, management, and prevention of primary skin cancers. The importance of gross observation and slit lamp biomicroscopy of the adnexa cannot be undervalued as a means of detecting, diagnosing, and managing malignancies. Treatment modalities including surgical and medical treatments are discussed.

**Objectives:**

1. Epidemiology of the most common periocular premalignant and malignant lesions.
2. Develop the ability to clinically identify the signs of the most common lesions.
3. Understanding of when to make the appropriate referral for treatment.
4. Awareness of current treatment options.
5. Discussion of patient education to promote skin cancer awareness.

**Course outline:**

I. Epidemiology of primary skin cancers
- A. World Health Organization (WHO) and global statistics
  - 1. Identification regions of greatest concern.
  - 2. Infrastructure of underdeveloped, developing, or developed countries
- B. U.S. statistics
  - 1. Comparison to other cancers
  - 2. Burden on healthcare
- C. Statistical trends of the incidence of primary skin cancers
  - 1. With relation to environmental influences.
  - 2. With relation to identification and treatment.
- D. Economic burden both global and U.S.

II. Characteristics of skin cancers
- A. Signs that raise suspicion of benign vs. malignant
  - 1. The "A-B-C-D-E" rule
    - a. Asymmetric lesion
    - b. Border irregularity
    - c. Color variation or changes
    - d. Diameter is larger (6mm reference)
    - e. Elevation of lesion
- B. Symptoms that may raise concern
  - 1. Progression – observed changes in size, shape, color, ulceration, others
  - 2. Aesthetics – alteration in tissue appearance
  - 3. Morbidity - alteration in tissue function
  - 4. Pain, sting, numb, others experienced by patient
- C. Risk factors associated with skin cancer
  - 1. Ultraviolet (UV) light exposure (chronic and acute)
  - 2. Age – accumulation of toxic exogenous and endogenous factors
  - 3. Race – light skin tone, ethnicity
  - 4. Gender (males > females) *

5. Family history
6. Smoking history
7. Human papilloma virus (HPV)
8. Ionizing radiation exposure
9. Alteration in skin integrity (example of thermal burns)
10. Immunosuppression (both acquired and PLANNED)

III. The most common primary skin cancers
A. Basal cell carcinoma (BCC)
B. Squamous cell carcinoma (cSCC, cutaneous squamous cell carcinoma)
C. Malignant melanoma (cMM, cutaneous malignant melanoma)
D. Sebaceous cell carcinoma (aka sebaceous gland, meibomian gland)*

IV. Characteristics of the most common primary skin cancers
A. Most common clinical presentation of each cancer
1. Signs and symptoms
2. Most common location on the body
3. What the primary care optometry exam should include
B. The pathophysiology of non-melanotic and melanotic lesions
C. Association with metastasis and mortality

V. Clinical management
A. Who to refer to (know your options): use of proper terminology when communicating
1. General vs. specialized ophthalmology (oculoplastic surgeon, when involving adnexa)
2. General practitioner
3. Dermatologist
4. General plastic surgeon
B. Treatment options
1. Surgical – general excision, Mohs micrographic surgery
a. Review of benefits of both (economic and efficacy)
2. Non-surgical
a. Topical medications
b. Thermal intervention
c. Radiation
d. Chemotherapy
e. Photodynamic therapy
f. Experimental, others

V. Patient education
A. Sun safe practices, providing educational information
1. Literature in clinic
2. Direction to web resources
3. Newest options for UV protection (lotions and clothing)
B. Commitment to skin inspection and recommended care