Benign Tumors of the Lids and Adnexa

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Definition of a Benign Tumor

• A benign tumor is a mass of cells (tumor) that lacks the ability to invade neighboring tissue or metastasize.

Benign Tumors: Actinic keratosis

• Description
  • Slow-growing keratinization of the epithelium
  • Results from excessive sun exposure
  • Pre-malignant; may transform into squamous cell carcinoma

• Clinical Appearance
  • Rough, dry, and scaly plaque that is flat or slightly raised
  • Up to 3 cm in diameter individually
  • Several small lesions in a single area that coalesce into a distinct border
  • May be skin colored to dark brown

• Risks
  • Elderly individuals with lightly pigmented skin
  • Rarely develops on the eyelid
  • Common on the scalp, ears, forehead, and backs of hands
  • The patient may notice itching or burning of the lesion
Benign Tumors: Actinic keratosis

- Clinical Management
  - Biopsy for definitive diagnosis
  - Radiosurgical ablation
  - Cryotherapy or excised

Benign Tumors: Squamous Cell Papilloma

- Description
  - Outgrowth of fibrovascular connective tissue
  - Covered by irregular keratinized stratified squamous epithelium

- Clinical Appearance
  - Variable presentations
  - "Skin tag" type: narrow base, pedunculated, skin colored
  - Broad base with "raspberry like" appearance
  - May be difficult to differentiate from viral wart (human papillomavirus)

- Risks
  - No predilection to race or gender

- Clinical Management
  - Excision
Benign Tumors: Seborrheic keratosis

- AKA: Basal Cell Papilloma
- Description
  - Expansion of the squamous epithelium stemming from basal cell proliferation
  - Slow-growing lesion
- Clinical Appearance
  - Round, "stuck-on" lesion with "toothpaste" appearance
  - Up to 2.5 cm diameter
  - Slightly raised and crusty, often keratinized similar to actinic keratoses
  - Tan to dark brown in color
  - Variety of texture: granular to velvety
- Risks
  - Common in the elderly
  - Most people develop at least one during their lives
  - Usually develop on the head, neck, or trunk
- Clinical Management
  - No treatment required except for cosmetic reasons or if they become irritated
  - Removed by excision, cryosurgery or radio surgery

Benign Tumors: Inverted Follicular Keratosis

- Description
  - Rare and often rapid growing lesion arising from a hair follicle
  - Histologically similar to basal cell papilloma, but with deeper extension into the dermis
- Clinical Appearance
  - Non-pigmented papilloma at the lid margin
  - Up to 1 cm diameter
- Risks
  - Typically older males
- Clinical Management
  - Deep excision
  - Recurrence is common if not completely removed
Benign Tumors: Inverted Follicular Keratosis

Description
- Rare and rapidly growing variant of actinic keratosis
- Also pre-malignant, potentially transforming into squamous cell carcinoma

Clinical Appearance
- Initially appears as a pink hyperkeratotic lesion usually on the lower lid
- Then begins to invovle and keratin-filled crater often forms
- Complete resolution can occur after a year leaving a residual scar

Risks
- Same demographic as actinic keratosis
- Higher occurrence in patients on immunosuppressive therapy following kidney transplants

Clinical Management
- Usually excised
- Occasionally treated with cryotherapy or radiosurgery

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Benign Tumors: Keratoacanthoma

Description
- Also a rapidly growing variant of actinic keratosis
- Also potentially transforming into squamous cell carcinoma

Clinical Appearance
- Initially appears as a pink hyperkeratotic lesion usually on the lower lid
- Then begins to involute and keratin-filled crater often forms
- Complete resolution can occur after a year leaving a residual scar

Risks
- Same demographic as actinic keratosis
- Higher occurrence in patients on immunosuppressive therapy following kidney transplants

Clinical Management
- Usually excised
- Occasionally treated with cryotherapy or radiosurgery
Benign Tumors: Melanocytic Nevus

- **Description**
- Tumor composed of cells derived from either epidermal or dermal melanocytes
- Acquired and congenital forms
- Generally low to no malignant potential

- **Clinical Appearance**
  - **Junctional:** Uniform brown macule or patch
  - **Compound:** Uniform, light to dark brown, raised papule
  - **Intradermal:** Papillomatous with little to no pigment. Associated with dilated vessels and protruding lashes

- **Risks**
  - Junctional type occurs in the young
  - Compound type occurs in middle age
  - Intradermal type most common overall and occurs in the elderly

- **Clinical Management**
  - Removable for cosmetic reasons or if malignancy is suspected
  - Excision may need to be followed by reconstruction depending on location and size

Benign Tumors: Xanthelasma

- **Description**
  - Aggregation of lipid filled macrophages at the level of the dermis
  - Common and frequently bilateral

- **Clinical Appearance**
  - Yellowish subcutaneous plaque
  - Usually on the medial portion of the eyelids
  - Often multiple

- **Risks**
  - Middle aged and the elderly
  - May be associated with elevated cholesterol especially when occurring in younger individuals and with cataracts

- **Clinical Management**
  - Removed for cosmetic reasons
  - Usually treated with carbon dioxide or argon laser
  - Recurrence suggests persistently elevated cholesterol
Benign Tumors: Xanthelasma

- Description
  - Abnormal proliferation of the germinal matrix cells in a hair follicle
  - Frequently becomes calcified

- Clinical Appearance
  - Deep nodule
  - Becomes hard if calcified

- Risks
  - Common in young females

Benign Tumors: Pilomatricoma

- Description
  - Abnormal proliferation of the germinal matrix cells in a hair follicle
  - Frequently becomes calcified

- Clinical Appearance
  - Deep nodule
  - Becomes hard if calcified

- Risks
  - Common in young females

- Clinical Management
  - Excision
Benign Tumors: Neurofibroma

- **Description**
  - Abnormal proliferation of Schwann cells, fibroblasts, and axons

- **Clinical Appearance**
  - Characteristics: S-shaped lesion
  - Typically located on the upper lid

- **Risks**
  - Solitary lesions occur in adults
  - 25% associated with neurofibromatosis-1
  - Children with neurofibromatosis-1 are affected by diffuse lesions

- **Clinical Management**
  - Solitary lesions removed by excision
  - Diffuse lesions are more difficult to remove

Benign Cysts: Chalazion

- **Description**
  - AKA: meibomian cyst
  - Fatty secretions of a meibomian gland are retained
  - Causes a chronic, painless inflammation
  - Patients with rosacea or meibomian gland dysfunction are more prone to developing multiple and recurrent chalazion

- **Clinical Appearance**
  - Nodule that has enlarged gradually
  - May enlarge up to nearly 1 cm
  - If large enough, may induce astigmatism by pressing on the cornea
Benign Cysts: Chalazion

- Clinical Management
  - About one third drain and resolve spontaneously
  - Standard therapy aimed at stimulating and speeding draining by
    - Sclerotid injection through the palpebral conjunctiva
    - 0.1-0.2 ml of Kenalog (triamcinolone)
    - May cause local depigmentation of the skin
  - Oral tetracycline/doxycycline useful in patients with chronic lid
    inflammation
    - 250 mg PO qid tetracycline
    - 100 mg PO bid doxycycline
    - 1-2 week course
  - Incision and drainage through the palpebral conjunctiva and
    tarsal plate
  - Biopsy a recurrent chalazion - it may be a sebaceous cell carcinoma

Benign Cysts: Cyst of Zeis

- Description
  - Non-translucent retention cyst involving the anterior lid margin
  - Gland of Zeis produces oil for eye lashes

Benign Cysts: Cyst of Moll

- Description
  - AKA: Sudoriferous cyst (produces sweat)
  - AKA: Hidrocystoma of eyelid
  - Translucent retention cyst involving the anterior lid margin
  - Gland of Moll is a modified sweat gland also emptying to the lashes
Benign Cysts: Epidermal Inclusion Cyst

- Description
  - AKA: Sebaceous cyst
  - AKA: Epidermoid cyst
  - AKA: Keratinous cyst of eyelid
  - Cyst lined by stratified squamous epithelium and containing keratin and sebaceous material
  - Result from ingrowth of surface epidermis after trauma or surgery

- Clinical Appearance
  - Round, well defined, non-tender mass
  - Ruptured cysts cause an acute inflammatory response and possible secondary infection

- Clinical Management
  - Excision

Benign Cysts: Apocrine Hidrocystoma

- Description
  - Rare cyst that forms from retained sweat in a blocked and dilated sweat duct
  - More common in females

- Clinical Appearance
  - Similar to Cyst of Moll with the exception that it does not involve the lid margin
  - Painless and usually asymptomatic
  - May grow up to 6mm

- Clinical Management
  - None, or excise if cosmetic issue

Excision of Epidermal Inclusion Cyst

Benign Cysts: Apocrine Hidrocystoma
Benign Cysts: Syringoma

- **Description**
  - Benign and asymptomatic proliferation of sweat gland duct epithelium
  - Relatively common
  - Most common in adult females
- **Clinical Appearance**
  - Multiple small (3mm or less) papules
  - May be skin color or yellowish
- **Clinical Management**
  - Removed for cosmetic reasons only
  - No set recommended removal technique
  - Options include excision, cryotherapy, dermabrasion, electrocautery and more

Benign Cysts: Milia

- **Description**
  - Tiny epidermoid cysts that tend to occur in clusters
  - Result from a blocked vellus hair follicles that retain the keratin
  - Very common – occurs in half of all infants
  - May also occur following dermabrasion or damage to the follicle
- **Clinical Appearance**
  - Small pearly white to yellowish papules
- **Clinical Management**
  - No treatment necessary
  - Needle expression or radiosurgical ablation if cosmetic issue

Benign Tumors: Acrochordon (Skin Tag)

- **Description**
  - May be caused by rubbing
  - Increased incidence with age
  - Appearance: pedunculate, fleshy, skin-colored mass
  - Benign, slow-growing, usually asymptomatic, may cause irritation
  - Definitive diagnosis by biopsy
- **Risks**
  - Obesity
  - Diabetes
- **Clinical Management**
  - Observe
  - Surgical excision (biopsy the base)
  - Radiosurgical excision
  - Cryotherapy
Thank You!