8.8.1. Neoplastic Disorders of the Conjunctiva and Cornea I: Management

- Surgical Treatment
  - complete removal of the tumor
    - 4 mm of uninvolved tissue surrounding the lesion
  - avoid touching the tumor
    - "no touch" technique
    - incisional biopsies should be avoided
  - alcohol-assisted epithelial curettage with a surgical blade
    - for corneal epithelial involvement
    - avoid violation of the Bowman membrane
      - natural barrier to tumor extension into the corneal stroma
  - +- lamellar sclerectomy
  - cryotherapy
    - improves prognosis (especially in conjunctival melanoma)
  - additional manipulations should be performed with clean surgical instruments
  - conjunctival closure
    - primary conjunctival closure
    - conjunctival autograft
    - amniotic membrane transplantation
      - facilitates reepithelialization
      - reduces postoperative inflammation
      - should be cut slightly larger than the defect
      - may be attached with fibrin-based tissue adhesive
    - suture
      - absorbable (9-0 or 10-0 polyglactin)
      - nonabsorbable (10-0 nylon)
  - stem cell transplantation
    - for chronic epitheliopathy
      - if more than 2/3 of the limbus is removed
  - specimen handling
    - placed on filter paper
    - label edges
    - avoid damage to the specimen during removal
  - pathology label should include the following information
    - age
    - ethnicity
    - duration of the lesion
    - whether the lesion has changed clinically

- Lesions that cause concern for possible malignancy
  - elevated lesions
  - extensive pigmented lesions, even if flat
  - lesions fixed to the underlying tissues
  - lesions with a large feeder vessel

- Topical Chemotherapy
  - approach
    - primary treatment
      - before tumor excision
        - to shrink large ocular surface squamous tumors preoperatively
      - instead of tumor excision
    - adjunctive therapy after tumor excision
      - it treats the entire ocular surface!
  - squamous lesions
    - topical interferon-α2b
      - first-line therapy
    - topical mitomycin c (mmc)
      - for squamous lesions that do not respond to interferon-α2b
    - 5-fluorouracil (5-fu)
  - atypical melanocytic lesions
    - MMC
      - the most commonly used agent
  - interferon-α2b
    - primary therapy for squamous tumors
    - very well tolerated
    - expensive
    - may take several (2-4) months to work
    - 4 times daily until clinical response occurs
  - MMC
    - for both squamous cell carcinoma and atypical melanocytic lesions
    - 1-2 weeks
      - drug holiday of 2-4 weeks between treatments
    - toxicity
      - topical corticosteroids may help with the surface toxicity
    - punctal plugs
      - reduce the chance of systemic absorption
      - help prevent punctal stenosis
    - inexpensive
    - works more quickly than topical interferon-α2b
  - 5-fluorouracil
    - if the other agents are unavailable, ineffective, or not tolerated

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