4.5.1. Conjunctiva (I)

Topography

Regions

- Bulbar
- Forniceal
- Palpebral
  - Epithelial ridges
- Caruncular
  - Contains
    - Sebaceous glands
    - Hair follicles

Tissues

Epithelium

- Non-keratinized stratified squamous
- Goblet cells
  - Most numerous in
    - Fornix
      - Pseudoglands of Henle
        - Infoldings of conjunctiva with abundant goblet cells
    - Plica

Stroma

- Substantia propria
  - General
    - Thickest in fornix
    - Thinnest over tarsus
    - Fuses with Tenon capsule in bulbar region
  - Constituents
    - Collagen fibers
    - Vessels, lymphatics, nerves
    - Accessory lacrimal glands
    - Lymphocytes
      - Lymphoid follicles
        - Conjunctiva-associated lymphoid tissue
    - Plasma cells, macrophages, mast cells

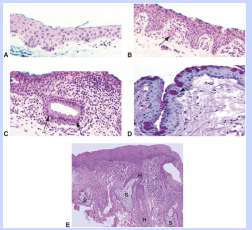


Figure 5-1 (© 2020 American Academy of Ophthalmology)

Congenital anomalies

Normal mature tissue in abnormal location

Limbal dermoid

- Location
  - Inferotemporal
    - Limbus
  - Central cornea
- Types
  - Isolated
    - Firm
    - Dome-shaped
    - White-yellow
    - Variable size
    - Dermal adnexal structures
    - +- Keratinized
      - Epithelium
  - Syndromic
    - Bilateral
      - Goldenhar syndrome (oculoauriculovertebral dysgenesis)
        - Epibulbar dermoid
        - Upper lid coloboma
        - Preauricular skin tags
        - Vertebral anomalies
      - Linear nevus sebaceous syndrome

Lipodermoid

- Softer & yellower than limbal dermoid
- Fornix
- Superotemporal
- +- Orbital extension
- +- Dermal adnexal structures
- +- Goldenhar or linear nevus sebaceous syndromes

Choristomas

- Types
  - Ectopic lacrimal gland
  - Contains bone
    - Episcleral osseous (osseocartilaginous) choristoma
  - Multiple types of choristomas
    - Complex

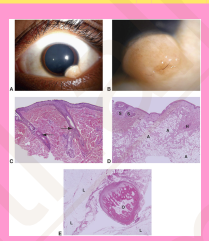


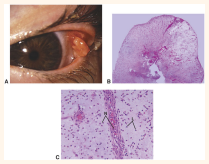
Figure 5-2 (© 2020 American Academy of Ophthalmology)

Normal mature tissue overgrowth in normal location

- Congenital
  - Capillary hemangioma
- Hamartomas

Pyogenic granuloma

- Reddish pedunculated nodule
- Predisposing conditions
  - Chalazion
  - Trauma
  - Surgery
- Histology
  - Granulation tissue
    - Acute & chronic inflammatory cells
    - Proliferating capillaries
    - Spoke-wheel pattern



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Ophthalmology Mind Maps/Arman Mashayekhi, MD