Dermoids

- The lesions are choristomas, which are congenital masses of tissue that have been dislocated from their normal position
- Limbal dermoids—overlapping the cornea and sclera, often inferotemporally
- Often seen at birth or slightly after birth and may increase in size as child grows

- Tumor contains keratinized epithelium, fibrous tissue, hair, fat, blood vessels, nerves, glands, cartilage, and even teeth, appear Y/W, solid, vascularized mass
- Decrease vision if large enough or if induces an astigmatic error
- Approximately 30% of individuals with Goldenhar’s syndrome have dermoids
- Surgical removal
• Congenital Hereditary Endothelial Dystrophies-CHED (covered under Dystrophies), bilateral, diffuse corneal edema at birth or within a few of life

• Conditions with cloudy cornea at birth or in infancy
  – Congenital glaucoma
  – Birth trauma (forceps delivery)
  – Congenital hereditary endothelial dystrophy
  – Posterior polymorphous dystrophy

Degenerations

• Central or diffuse/Secondary
  – Amyloid
    • Etiology: associated with trauma, phlyctenular, trachoma, interstitial, keratitis, uveitis, glaucoma, R.L.F., sarcoidosis, and keratoconus

• Spheroid (climatic droplet keratopathy, oil droplet)
  • Etiology: nonhereditary corneal disease related to geographic or climatic conditions, or previous inflammation, proteinaceous deposits, typically males
  • Slit lamp: bilateral, spherical, translucent, golden-brown, oily droplets under epithelium or conjunctiva at 3 and 9:00; may also be noted central, superficial stroma in a band shape
  • Fluoresce brightly in UV

• Slit lamp: lesions consist of small, salmon pink to yellow-white central, raised, fleshy, waxy masses with a nodular surface on the cornea and conjunctiva; may be vascularized
• Deposits seen in lattice dystrophy are also amyloid in nature (primary)
• Types: primary (age or possibly hereditary); secondary (chronic ocular disease or climatic “UV” insult)
• Usually no treatment other than protection from UV or may be progressive and cause visual impairment, which may require lamellar keratectomy or corneal transplant

Coat’s white ring
• Etiology: corneal opacity is usually located where there was a foreign body by a metallic FB, deposit contains iron & deposition of calcific material, asymptomatic, and no treatment
• Slit lamp: small, granular, white, oval ring in the anterior stroma
Salzmann’s Degeneration

- Etiology: noninflammatory condition related to previous inflammation, especially viral, old phlyctenular, trachomatous, and luetic cornea, or no clear history of preceding eye disease
- Slit lamp: discrete, elevated, bluish, white superficial stromal opacities, raised nodules usually arranged in a circular fashion around pupil area: often appear within or adjacent to an area of previous scarring
- May lead to poor tear film wetting, dellen & irregular astigmatism, discomfort (epithelial breakdown) and if on visual axis poor vision
- Treatment: scraping, superficial keratectomy, lamellar keratoplasty or excimer)
Band-Shaped Keratopathy

- Etiology: calcium salts which may occur from localized ocular inflammatory disease (particularly chronic uveitis-JRA), silicone oil in the A/C glaucoma, IK, drugs or from systemic disease causing hypercalcemia (ie: hyperparathyroidism), also seen in phthisis bulbi, severe chronic keratitis, age-related in otherwise healthy patients
- Elevation of tissue pH favors precipitation of calcium salts

- Slit lamp: deposits located in a band shape in the interpalpebral fissure area of the basement membrane/Bowman’s membrane with a lucid interval, “Swiss cheese” appearance represent areas where small nerves penetrate Bowman’s membrane
- Treatment: If visually significant, removal by applying EDTA and anesthetic plus scraping (or phototherapeutic keratectomy-excimer?)
- It is important to treat any underlying condition