







MK Risk Associated to Lens Modality

























Resolution of Suction Induced Red Eye



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Contact Lens Red Eye Cases Vision Expo West Melanie Frogozo, OD



Case

- 40-year-old
- Long time history of monthly disposable lenses
- Reports redness, pain, and light sensitivity with or without contact lens on OS

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Staph Marginal Keratitis

- An inflammatory disease of the peripheral cornea
- peripheral stromal infiltrates which are often associated with epithelium break down and ulceration
- blepharoconjunctivitis
- inflammatory response against S. aureus antigens

Etiology and pathophysiology

- inflammatory reaction against staphylococcal antigens
- bacterial antigens in the peripheral cornea possibly triggers a type III hypersensitivity reaction
- immunocomplexes are formed and deposited in the peripheral corneal stroma
 - Possible epithelial damage, forming a marginal ulcer
 - · direct contact between the peripheral cornea and the eyelid margin

Risk Factors and Primary Prevention

- · longstanding blepharitis, conjunctivitis, or meibomitis Primarily associated with Staphylococcal blepharoconjunctivitis • Haemophilus, Moraxella or Streptococcus
- Management of the underlying blepharitis for prevention

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Physical examination

- stromal infiltrates in the peripheral cornea, between the eyelid margin and the limbus.
- 1-2mm parallel to the limbus • there can be an epithelial lesion, leading to marginal ulcer
- related to symptomatic blepharoconjunctivitis
- · Erythema and edema of the eyelid margin associated with telangiectasias
- madarosis, poliosis, trichiasis
- · presence of hard scales in the base of eyelashes • S. aureus blepharitis

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Management

- reduce local inflammation by reducing staphylococcal antigens at the eyelid margins and corneal surface
- Topical corticosteroids
- peripheral stromal infiltrates without epithelial defects
- epithelial defect
- steroids cautiously
 combined with a broad-spectrum antibiotic
- Blepharitis treatment
- hygiene, topical antibiotic ointments, oral antibiotics if necessary (doxycycline, tetracyclines, or azithromycin)
- · steroids can be useful to control underlying blepharitis

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Treatment for patient 64

Case

- 48-year-old female
- · Long time corneal GP wearer
- Pain on side of eye where contact lens sits

Differential Diagnosis?

Vascularized Limbal Keratitis (VLK)



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Etiology

- heaping of hyperplastic corneal tissue secondary to lateral lens
 movement
- conjunctival hyperemia and corneal infiltration
 - Vascularization from conjunctiva leads to the elevated epithelial mass
 erosions with significant corneal staining and hyperemia.
- related primarily to large lens diameters with minimal peripheral clearance

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SIGNS OF VLK

- elevated, opaque limbal mass
- horizontal axis at 3 and 9 o'clock or at 4 and 8 o'clock
- extensive corneal staining at the lesion site
- superficial and deep vascularization may be present, especially in the more advanced stages.
- complain of increased lens awareness and reduced wearing time.
- 'white spot' on the cornea with localized conjunctival injection

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TREATING VLK

- improving the peripheral lens-to-cornea
- In more advanced stages discontinue lens wear and initiate antibiotic/steroid therapy

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Treatment for patient

Case

- 38-year-old male
- History of red painful area exacerbated with scleral contact lens waer





Pinguecula

- are yellow-white, subepithelial conjunctival deposits that are typically found in the nasal or temporal anterior bulbar conjunctiva
- occasionally become pigmented or calcified
- benign and often the result of ultraviolet light exposure

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Pterygium

- wing-shaped folds of conjunctiva and fibrovascular tissue that invade the superficial corneal layers
- can result in corneal astigmatism or occlusion of the visual axis.
- preceded by pingueculae
- often associated with ultraviolet light exposure

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Treatment for patient

Disclosures*- Thomas Quinn, OD, MS, FAAO

- Bausch + Lomb
- CLMA (GPLI)
- CooperVision
- Essilor/Vision Source
- Lentechs
- Menicon
- wenicon
- STAPLE ProgramSynergEyes
- *Speaking/Clinical Research/Consultant











































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- Detailed History: is a powerful tool: give time to it
- Where's the redness?
- Itch doesn't necessarily mean allergy (though it might!)
- Burn doesn't necessarily mean dryness (it might!)
- Key Indicators that CL's are contributory to redness:
 - Improvement with contact lens removal
 Worsening with contact lens application
- Likely Contact Lens Culprits:
 - Hypoxia (especially with extended wear and high Rx)
 Mechanical/ Allergic
 Infection/ Inflammation
- Clean Lenses and Clean Hands!