

COVID-19 OCULAR ASSOCIATIONS IN THE SCIENTIFIC LITERATURE: SYNOPSIS 8

The COVID-19 pandemic began in December and has affected people in nearly every country in the world. We provide a summary of ocular-related associations with COVID-19 in the literature, and we plan to update this as we become aware of new manuscripts. Thus far, it appears that approximately 1-5% of COVID-19 patients experience conjunctivitis and very few COVID-19 patients exhibit virus in their tears.

Marvi Cheema M, Aghazadeh H, Nazarali S, Ting A, Hodges J, McFarlane A, Kanji JN, Zelyas N, Damji KF, Solarte C. Keratoconjunctivitis as the initial medical presentation of the novel coronavirus disease 2019 (COVID-19): A case report. Canadian Ophthalmological Society. 2020

- 29-year-old, healthy woman
- 1-month vacation in the Philippines 3 days before presentation
- Spent 1 day in San Francisco en route home
- Swam in the ocean and swimming pools while in Philippines and in pool upon return home
- Feeling well on her date of return
- 18 hours after return, she developed rhinorrhea, cough, nasal congestion, and right eye conjunctivitis
- On March 3, she denied any fever though took over-the-counter antipyretic medication
- Photophobia worsening, sore and swollen eyelid, and mucous discharge of the right eye
- 20/20 visual acuity OU; 1 to 2+ conjunctival injection, 3+ follicles, 1 small pseudodendrite inferior temporal cornea, and 8 small (0.2 mm) subepithelial infiltrates (SEIs) with overlying epithelial defects at superior temporal limbus
- Diagnose herpetic keratoconjunctivitis and started on oral valacyclovir 500 mg PO TID and moxifloxacin 1 drop QID OD
- Following day, patient's family physician coordinated throat swab for acute pharyngitis: negative for group A Streptococcus
- Patient returned two days later due to worsening redness, pain, and irritation
- Tender right pre-auricular node noted
- 20/20 OU; 2+ conjunctival injection development of numerous SEIs with pin-point staining over defects on temporal cornea
- New diagnosis: epidemic keratoconjunctivitis; oral valacyclovir and moxifloxacin drops continued, contact precautions suggested
- Returned next day due to worsening symptoms and vision
- Right eye 20/30; pinhole 20/30
- Tender right preauricular lymph node noted again, as well as cervical lymphadenopathy
- Follicular conjunctivitis with 2+ conjunctival injection and over 50 SEIs with overlying epithelial defects diffusely through entire cornea
- Presumed viral etiology, so continued on valacyclovir and counselled regarding this being very contagious
- Conjunctival swabs to test for chlamydia, gonorrhea, and bacterial culture were negative
- On March 8, nasopharyngeal swab positive for COVID-19, and retrospective testing of eye swab originally submitted for gonorrhea/chlamydia on March 6, was weakly positive for COVID-19
- Conclusion: "The case emphasizes the importance for eye care professionals to remain vigilant and consider SARS-CoV-2 as the causative agent in patients presenting with viral conjunctivitis, particularly in high-risk patients with travel to areas of active transmission of the virus."



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