

Was haben wir gelernt? Und sind wir auf die Zukunft vorbereitet?

Ein Jahr Covid-19 und die Auswirkungen auf die Kontaktlinsenpraxis

Literatur

- [1] World Health Organization (WHO). Timeline: WHO's COVID-19 response. 2020. Available at www.who.int/emergencies/diseases/novel-coronavirus-2019/interactive-timeline#!. Accessed Nov. 6, 2020.
- [2] American Academy of Optometry. COVID-19 Hub. 2020. Available at www.aaopt.org/my-covid-hub. Accessed Nov. 5, 2020.
- [3] American Optometric Association. COVID-19 latest updates. 2020. Available at www.aoa.org/covid-19/covid-19-latest-updates?sso=y. Accessed Nov. 5, 2020.
- [4] Jones L, Walsh K, Willcox M, Morgan P, Nichols J. The COVID-19 pandemic: Important considerations for contact lens practitioners. *Cont Lens Anterior Eye*. 2020 Jun;43:196-203.
- [5] Centers for Disease Control and Prevention. Protect Your Eyes. Available at www.cdc.gov/contactlenses/protect-your-eyes.html. Accessed Nov. 8, 2020.
- [6] Wu D, Wu T, Liu Q, Yang Z. The SARS-CoV-2 outbreak: What we know. *Int J Infect Dis*. 2020 May;94:44-48.
- [7] Golin AP, Choi D, Ghahary A. Hand sanitizers: A review of ingredients, mechanisms of action, modes of delivery, and efficacy against coronaviruses. *Am J Infect Control*. 2020 Sep;48:1062-1067.
- [8] Willcox MD, Walsh K, Nichols JJ, Morgan PB, Jones LW. The ocular surface, coronaviruses and COVID-19. *Clin Exp Optom*. 2020 July;103:418-424.
- [9] Hamming I, Timens W, Bulthuis MLC, Lely AT, Navis GJ, van Goor H. Tissue distribution of ACE2 protein, the functional receptor for SARS coronavirus. A first step in understanding SARS pathogenesis. *J Pathol*. 2004 Jun;203:631-637.
- [10] Xu H, Zhong L, Deng J, et al. High expression of ACE2 receptor of 2019-nCoV on the epithelial cells of oral mucosa. *Int J Oral Sci*. 2020 Feb 24;12:8.
- [11] Habibzadeh P, Stoneman EK. The Novel Coronavirus: A Bird's Eye View. *Int J Occup Environ Med*. 2020 Apr;11:65-71.
- [12] Zhou L, Xu Z, Castiglione GM, Soiberman US, Eberhart CG, Duh EJ. ACE2 and TMPRSS2 are expressed on the human ocular surface, suggesting susceptibility to SARS-CoV-2 infection. *Ocul Surf*. 2020 Oct;18:537-544.
- [13] Zhang X, Chen X, Chen L, et al. The evidence of SARS-CoV-2 infection on ocular surface. *Ocul Surf*. 2020 Jul;18:360-362.
- [14] Sungnak W, Huang N, Bécavin C, et al. SARS-CoV-2 entry factors are highly expressed in nasal epithelial cells together with innate immune genes. *Nat Med*. 2020 May;26:681-687.
- [15] Grajewski RS, Rokohl AC, Becker M, et al. A missing link between SARSCoV-2 and the eye?: ACE2 expression on the ocular surface. *J Med Virol*. 2020 Jun 4;10.1002/jmv.26136.
- [16] Lange C, Wolf J, Auw-Haedrich C, et al. Expression of the COVID-19 receptor ACE2 in the human conjunctiva. *J Med Virol*. 2020 Oct;92:2081-2086.
- [17] Xiang M, Zhang W, Wen H, Mo L, Zhao Y, Zhan Y. Comparative transcriptome analysis of human conjunctiva between normal and conjunctivochalasis persons by RNA sequencing. *Exp Eye Res*. 2019 Jul;184:38-47.
- [18] Cheong KX. Systematic Review of Ocular Involvement of SARS-CoV-2 in Coronavirus Disease 2019. *Curr Ophthalmol Rep*. 2020 Sep 26:1-10.
- [19] Güemes-Villahoz N, Burgos-Blasco B, Vidal-Villegas B, et al. Novel Insights into the Transmission of SARS-CoV-2 Through the Ocular Surface and its Detection in Tears and Conjunctival Secretions: A Review. *Adv Ther*. 2020 Oct;37:4086-4095.
- [20] Aiello F, Gallo Afflitto G, Mancino R, et al. Coronavirus disease 2019 (SARSCoV-2) and colonization of ocular tissues and secretions: a systematic review. *Eye (Lond)*. 2020 Jul;34:1206-1211.
- [21] Lawrenson JG, Buckley RJ. COVID-19 and the eye. *Ophthalmic Physiol Opt*. 2020 Jul;40:383-388.
- [22] Güemes-Villahoz N, Burgos-Blasco B, Arribi-Vilela A, et al. SARS-CoV-2 RNA detection in tears and conjunctival secretions of COVID-19 patients with conjunctivitis. *J Infect*. 2020 Sep;81:452-482.
- [23] Karimi S, Arabi A, Shahraki T, Safi S. Detection of severe acute respiratory syndrome Coronavirus-2 in the tears of patients with Coronavirus disease 2019. *Eye (Lond)*. 2020 Jul;34:1220-1223.
- [24] Kumar K, Prakash AA, Gangasagara SB, et al. Presence of viral RNA of SARSCoV-2 in conjunctival swab specimens of COVID-19 patients. *Indian J Ophthalmol*. 2020 Jun;68:1015-1017.
- [25] Seah IYJ, Anderson DE, Kang AEZ, et al. Assessing Viral Shedding and Infectivity of Tears in Coronavirus Disease 2019 (COVID-19) Patients. *Ophthalmology*. 2020 Jul;127:977-979.
- [26] Wu P, Duan F, Luo C, et al. Characteristics of Ocular Findings of Patients With Coronavirus Disease 2019 (COVID-19) in Hubei Province, China. *JAMA Ophthalmol*. 2020 May 1;138:575-578.
- [27] Xia J, Tong J, Liu M, Shen Y, Guo D. Evaluation of coronavirus in tears and conjunctival secretions of patients with SARS-CoV-2 infection. *J Med Virol*. 2020 Jun;92:589-594.
- [28] Zhou Y, Duan C, Zeng Y, et al. Ocular Findings and Proportion with Conjunctival SARS-COV-2 in COVID-19 Patients. *Ophthalmology*. 2020 Jul;127:982-983.
- [29] Zhou Y, Zeng Y, Tong Y, Chen C. Ophthalmologic evidence against the interpersonal transmission of 2019 novel coronavirus through conjunctiva. *medRxiv*. 2020:2020.02.11.20021956.

- [30] Cheema M, Aghazadeh H, Nazarali S, et al. Keratoconjunctivitis as the initial medical presentation of the novel coronavirus disease 2019 (COVID-19). *Can J Ophthalmol*. 2020 Aug;55:e125-e129.
- [31] Chen L, Liu M, Zhang Z, et al. Ocular manifestations of a hospitalised patient with confirmed 2019 novel coronavirus disease. *Br J Ophthalmol*. 2020 Jun;104:748-751.
- [32] Colavita F, Lapa D, Carletti F, et al. SARS-CoV-2 Isolation From Ocular Secretions of a Patient With COVID-19 in Italy With Prolonged Viral RNA Detection. *Ann Intern Med*. 2020 Aug 4;173:242-243.
- [33] Daruich A, Martin D, Bremond-Gignac D. Ocular manifestation as first sign of Coronavirus Disease 2019 (COVID-19): Interest of telemedicine during the pandemic context. *J Fr Ophtalmol*. 2020 May;43:389-391.
- [34] Khavandi S, Tabibzadeh E, Naderan M, Shoar S. Corona virus disease-19 (COVID-19) presenting as conjunctivitis: atypically high-risk during a pandemic. *Cont Lens Anterior Eye*. 2020 Jun;43:211-212.
- [35] Ying NY, Idris NS, Muhamad R, Ahmad I. Coronavirus Disease 2019 Presenting as Conjunctivitis. *Korean J Fam Med*. 2020 Jun 1. [Online ahead of print]
- [36] Scalinci SZ, Trovato Battagliola E. Conjunctivitis can be the only presenting sign and symptom of COVID-19. *IDCases*. 2020;20:e00774.
- [37] Docherty AB, Harrison EM, Green CA, et al. Features of 20 133 UK patients in hospital with covid-19 using the ISARIC WHO Clinical Characterisation Protocol: prospective observational cohort study. *BMJ*. 2020 May 22;369:m1985.
- [38] World Health Organization. Coronavirus disease (COVID-19) advice for the public. Available at www.who.int/emergencies/diseases/novel-coronavirus-2019/advice-for-public. Accessed Oct. 28, 2020.
- [39] Zeri F, Naroo SA. Contact lens practice in the time of COVID-19. *Cont Lens Anterior Eye*. 2020 Jun;43:193-195.
- [40] Jones L, Walsh K. COVID-19 and contact lenses: Practice re-entry considerations. *Optician*. 2020 Aug 19:22-28.
- [41] Amesty MA, Alió Del Barrio JL, Alió JL. COVID-19 Disease and Ophthalmology: An Update. *Ophthalmol Ther*. 2020 Sep;9:1-12.
- [42] Lai THT, Tang EWH, Chau SKY, Fung KSC, Li KKW. Stepping up infection control measures in ophthalmology during the novel coronavirus outbreak: an experience from Hong Kong. *Graefes Arch Clin Exp Ophthalmol*. 2020 May;258:1049-1055.
- [43] Safadi K, Kruger JM, Chowder I, et al. Ophthalmology practice during the COVID-19 pandemic. *BMJ Open Ophthalmol*. 2020 Apr 19;5:e000487.
- [44] Nagra M, Vianya-Estopa M, Wolffsohn JS. Could telehealth help eye care practitioners adapt contact lens services during the COVID-19 pandemic? *Cont Lens Anterior Eye*. 2020 Jun;43:204-207.
- [45] British Contact Lens Association. Use of gloves in contact lens practice COVID-19 Guidance. 2020 Jun 23. Available at www.bcla.org.uk/Public/Public/Consumer/Use-of-gloves-in-Covid-19.aspx. Accessed Nov. 7, 2020.
- [46] College of Optometrists of Ontario. Return to Work: Infection Prevention and Control for Optometric Practice (May 2020). Available at https://opto.ca/sites/default/files/resources/documents/covid-return-to-work-ipac_0.pdf. Accessed Nov 8, 2020.
- [47] The College of Optometrists. COVID-19: Updates, guidance, information and resources. 2020. Available at www.college-optometrists.org/guidance/covid19-coronavirus-guidance-information.html. Accessed Nov 5, 2020.
- [48] Sulley A, Young G, Hunt C, McCready S, Targett MT, Craven R. Retention Rates in New Contact Lens Wearers. *Eye Contact Lens*. 2018 Sep;44 Suppl 1:S273-S282.
- [49] Morgan PB. Contact lens wear during the COVID-19 pandemic. *Cont Lens Anterior Eye*. 2020 Jun;43:213.
- [50] García-Ayuso D, Escámez-Torrecilla M, Galindo-Romero C, et al. Influence of the COVID-19 pandemic on contact lens wear in Spain. *Cont Lens Anterior Eye*. 2020 Jul 17;S1367-0484(20)30135-1. [Online ahead of print]
- [51] Vianya-Estopa M, Wolffsohn JS, Beukes E, Trott M, Smith L, Allen PM. Soft contact lens wearers' compliance during the COVID-19 pandemic. *Cont Lens Anterior Eye*. 2020 Aug 14; S1367-0484(20)30155-30157. [Online ahead of print]
- [52] Polk M. Seizing the moment. *Optician*. 2020 Aug:14-17.
- [53] MacKay J. Coronavirus productivity data: How the pandemic is changing the way we use digital devices, apps, and tools. *RescueTime: blog*. 2020 May 13. Available at <https://blog.rescuetime.com/coronavirus-device-usage-statistics>. Accessed Sep. 2, 2020.
- [54] Jones L. Why face masks can make eyes feel dry, and what you can do about it. *The Conversation*. 2020 Aug 19. Available at <https://theconversation.com/whyface-masks-can-make-eyes-feel-dry-and-what-you-can-do-about-it-143261>. Accessed Sep. 2, 2020.