OPEN ACCESS Freely available online

Journal of Eye Diseases and Disorders

Editorial

Ocular Signs of Covid-19

Hong Levkovitch-Verbin*

Department of Goldschleger Eye Institute, Sheba Medical Center Tel-Hashomer, Israel

EDITORIAL NOTE

Studies have suggested a possible association of coronavirus 2019 (COVID-19) with conjunctivitis, chemosis, and other ocular symptoms such as red or sore eyes.

The estimated proportion of those with ocular symptoms, some consistent with conjunctivitis, ranges widely, from less than 1% (Centers for Disease Control and Prevention Coronavirus 2019-Associated Hospitalization Surveillance Network) to more than 30%, suggesting that conjunctivitis could be a disease feature and potentially a useful diagnostic sign. More precise characterization of clinical eye presentations associated with COVID-19 infection or social distancing measures may be hindered by a marked reduction in eye care clinical visit data as a result of sheltering in place. Moreover, observations of other life-threatening conditions take precedence in clinical documentation [1-5]. Online search and social media data can reflect community seasonal clinical eye disease patterns and conjunctivitis epidemics [6].

Increased search interest during the pandemic compared with the same months in prior years for terms representing conjunctivitis (especially in Italian) could suggest an association with COVID-19 infection, as has been suggested from isolated case reports on COVID-1 9 patients [1-4]. In English, despite a small early spring increase, *conjunctivitis* and *pink eye* searches decreased significantly in the later spring months of 2020 compared with prior years. This could suggest that although COVID-19 may be associated with conjunctivitis, any such English search interest was offset by a larger reduction in school-related conjunctivitis. That searches for *conjunctivitis* and *pink eye* (but no other eye symptoms) in English were significantly lower in March and April 2020 than in prior years supports the possibility that school closures and social distancing may have reduced the incidence of contagious conjunctivitis not related to COVID-19. This supports the public health policy of distancing for controlling conjunctivitis outbreaks [6].

We used Google Trends data, readily available outside of a clinic environment, to investigate whether public interest in search terms related to eye conditions might suggest a surge in COVID-19–related symptoms during the COVID-19 shelter-in-place months.

REFERENCES

1. Wu P, Duan F, Luo C. Characteristics of ocular findings of patients with coronavirus disease 2019 (COVID-19) in Hubei Province, China. JAMA Ophthalmol. 2020;138:575-578.
2. Hong N, Yu W, Xia J. Evaluation of ocular symptoms and tropism of SARS-CoV-2 in patients confirmed with COVID-19. Acta Ophthalmol. 2020.
3. 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;43:389-391.
4. Colavita F, Lapa D, Carletti F. SARS-CoV-2 isolation from ocular secretions of a patient with COVID-19 in Italy with prolonged viral RNA detection. Ann Intern Med. 2020.
5. Zhou Y, Duan C, Zeng Y. Ocular findings and proportion with conjunctival SARS-COV-2 in COVID-19 patients. Ophthalmol. 2020;127:982-983.
6. Deiner MS, McLeod SD, Wong J. Google searches and detection of conjunctivitis epidemics worldwide. Ophthalmol. 2019;126:1219-1229.

Correspondence to: Hong Levkovitch-Verbin, Department of Goldschleger Eye Institute, Sheba Medical Center Tel-Hashomer, Israel, E-mail: halevko@hotmail.com

Received date: June 30, 2020; **Accepted date:** July 14, 2020; **Published date:** July 21, 2020

Citation: Levkovitch-Verbin H (2020) Ocular Signs of Covid-19. J Eye Dis Disord 5:e140. doi: 10.35248/2684-1622.20.5.e140