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OTHER ARTICLES

# Prevalence of General and Otorhinolaryngological Symptoms Post-COVID-19 Regarding the Time of Presentation

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Dear Editor,

We read with pleasure the study entitled: **"Vocal Disorders in Patients with COVID 19 in Egypt"** published online in the May 28, 2021 of the Indian Journal of Otolaryngology and Head & Neck Surgery [1]. The main outcomes of the study were; dysphonia and phonesthenia were reported in 79.24% and 18.86% of the patients (n = 106) with mild-and moderate confirmed COVID-19 respectively, congestion of the vocal cords was the commonest laryngoscopic finding, and there was a significant association between dysphonic subjects and rhinorrhea, taste dysfunction, sore throat, and cough. Besides, significant association was observed between phonesthenic subjects and allergic rhinitis. We have many comments regarding the methodology, results, discussion, and limitations of the study.

The authors didn't take in consideration the exact time of the presentation of the patients during the collection of the data. Up to one month following the cure from the COVID-19 is relatively large time scale, and the prevalence of persistent symptoms might be decreased and changed from time to time [2]. Salepci et al. were reported in their study that the onset time and durations of otorhinolaryngological symptoms and general symptoms varied [2]. Therefore, this is considered as one of the main limitations of the study by Azzam et al.

Although, half of the reported symptoms occurred in above 50% of the patients, the attractive thing is the highest prevalence symptom was dysphonia (n = 84, 79.24%). Furthermore, if we add the number of the patients with phonesthenia (n = 20, 18.86%) to the patients with dysphonia, therefore, nearly all patients (104/106) were complained from voice abnormalities. The authors didn't discuss this strange finding and compare with previous studies regarding the general and otorhinolaryngological symptoms. Post-COVID-19 dysphonia was reported in previous studies with much lower prevalence than Azzam et al.s̀ study [3][3].

There is a repetition of the aims of the study in the first paragraph of the discussion section rather than describing the strength or the main outcomes of the study according to the STROBE Statement of the cross-sectional studies https://www.equatornetwork.org/wpcontent/uploads/2015/10/STROBE_checklist_v4_cross-sectional.pdf.

Of note, many viruses can cause voice abnormalities due to direct or indirect causes [5]. The COVID-19 also causes laryngitis owing to that the larynx contains the angiotensin-converting enzyme 2 receptor (ACE-2). The strange thing is that acute laryngitis due to COVID-19 persists much more than other viruses. The authors found that the congestion of the vocal cords was the commonest laryngoscopic finding, however, they didn't explore or discuss this issue.

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In conclusion, our suggestions and perspectives might have a positive impact on the understanding the general and otorhinolaryngological symptoms post-COVID-19, particularly voice abnormalities regarding the onset and duration. Moreover, this will open the door to think and find the possible mechanisms of these symptoms in future studies.

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