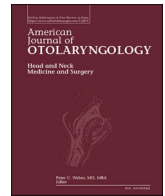




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Response to: Use of face masks and allergic nasal symptoms: Why not mention pollen count and air pollution data?

Dear Editor,

Thank you for the opportunity to prepare a commentary on this correspondence. The principle aim of our study was to evaluate the effects of face mask usage during the COVID-19 pandemic period on allergic rhinitis symptoms in patients with isolated pollen allergy. To this end, a questionnaire was administered to allergic rhinitis patients who were diagnosed with isolated pollen allergy based on the results of the skin prick test and showed symptoms during the study period, that is, March and April. The study was designed as a single-center study involving the only clinic in the region where allergic rhinitis patients are regularly diagnosed and followed up. Consequentially, the findings of this study indicated that the use of face masks during the pandemic period significantly reduced both nasal and eye complaints associated with allergic rhinitis in individuals with pollen allergy [1]. However, as stated by Liccardi et al., local pollen counts and atmospheric pollutant levels during the pre-pandemic and pandemic periods were not taken into account in this study. We agree with the authors that the changes in the pollen counts and pollutant levels in the atmosphere might have affected the results of this study to some extent. So, we would like to thank Liccardi et al. for reading with interest the article and for allowing us to complete the deficiencies that we overlooked in our study.

Pollination is a global natural phenomenon that occurs periodically. Every plant has a pollination period that is more or less the same each year. Nevertheless, the atmospheric local pollen counts in a given year may vary depending on climatic conditions [2]. For this reason, we have contacted the Provincial Directorate of Meteorology and came to know that periodic pollen counts are not regularly measured in our region and that only average temperature, precipitation, humidity, and wind speed values are recorded. The meteorological data recorded in April, i.e., the study period, in the last three years are shown in Table 1. These results indicate that there was no significant change in climatic conditions in our region in the pre-pandemic and pandemic period. Accordingly, it was concluded that the local pollen counts in the atmosphere have been comparatively stable in the last three years.

As stated by Liccardi et al., pollen-induced allergic rhinitis symptoms are also strongly associated with the presence of common pollutants in the atmosphere [3]. For this reason, atmospheric pollutant levels of the

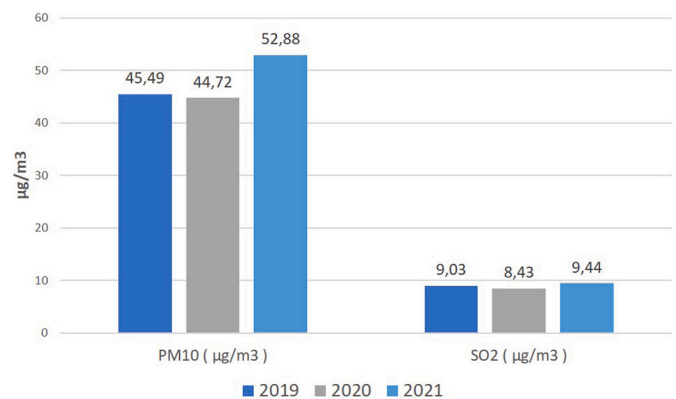


Fig. 1. The average atmospheric pollutants in April 2019–2021, in Denizli/Turkey.

last three years in our region were obtained from the National Air Monitoring Network of the Ministry of Environment, Urbanization and Climate Change of the Republic of Turkey [4]. PM10 and SO2 values recorded in April in the last three years are shown in Fig. 1. These results indicate that there was no significant difference between the yearly atmospheric pollutant levels in the period from 2019 to 2021.

In conclusion, it was determined that there was no significant change in the climatic conditions and atmospheric pollutant levels in the pre-pandemic and pandemic period in our region. Hence, it was concluded that the decrease observed in the severity of ocular symptoms associated with allergic rhinitis in individuals with pollen allergy as they started to use face masks was independent of the changes in the local pollen counts and the atmospheric pollutant levels. The findings of this study support the hypothesis that preventing the contact of allergens with the nasal mucosa may reduce ocular symptoms in allergic rhinitis patients. However, prospective controlled studies are needed to verify the results of this study.

Declaration of competing interest

None.

Acknowledgment

The authors thank to the Meteorological Office in Denizli for providing the climatic data for our region.

Table 1

The average meteorological data of our region in April 2019–2021.

	Humidity (%)	Wind speed (m/sn)	Temperature (°C)	Precipitation (kg/m ²)
April 2019	52.3	1.6	14.7	27.8
April 2020	53.7	0.9	15.8	32.2
April 2021	48.2	1.4	16.2	10.7

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