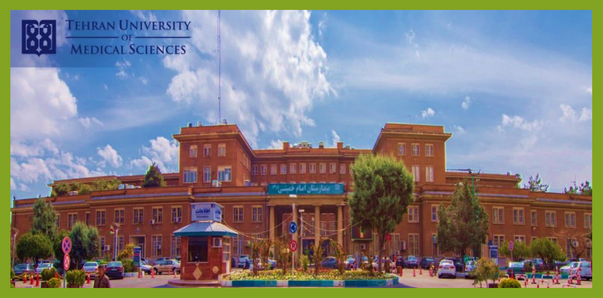

Incidence of Covid-19 Olfactory Dysfunction in Tehran, Iran

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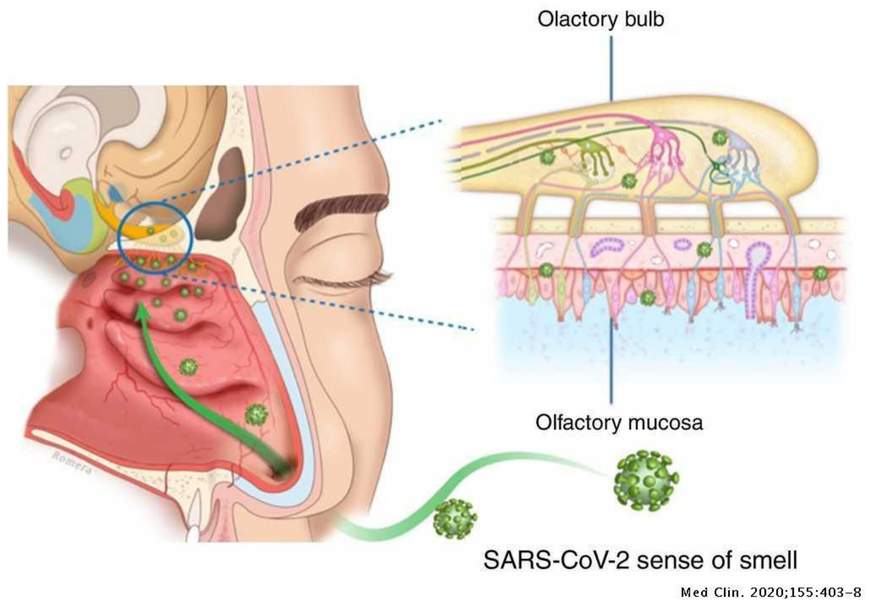
Introduction:

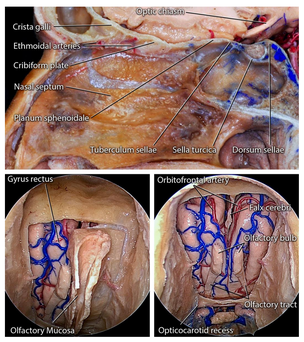
The severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) outbreak originated in Wuhan, China, in December 2019, and Iran was one of the first countries to be hit. It is currently enduring its fourth pandemic wave, and olfactory dysfunction is a common presentation with COVID-19.

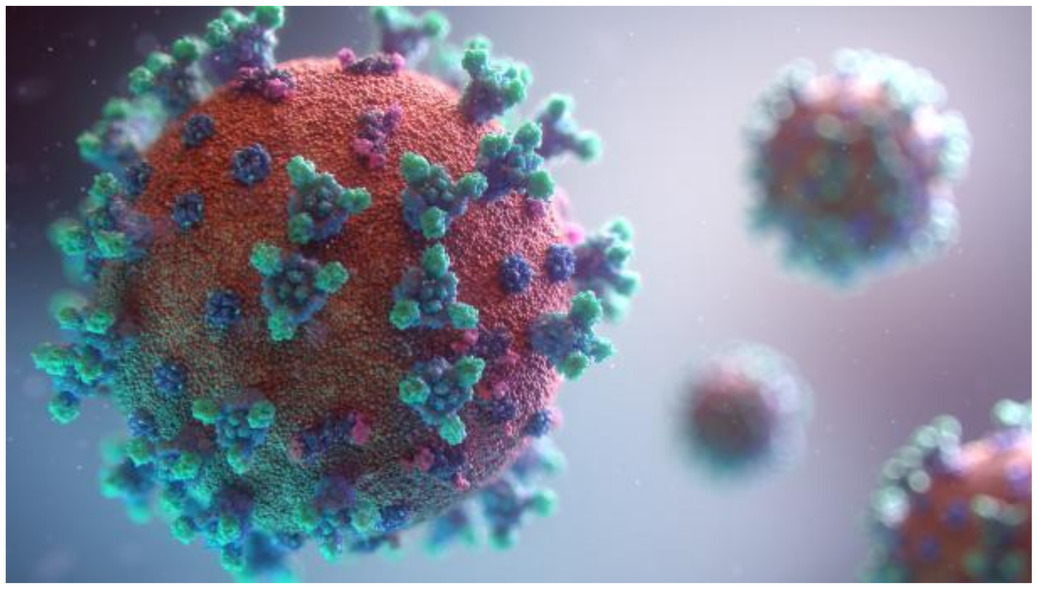
Discussion

Anosmia represents a ubiquitous clinical finding in COVID-19 patients. Current evidence suggests that SARS-CoV-2-related anosmia may be a new viral syndrome specific to COVID-19; otolaryngologists must be aware of this important finding in medical examinations.



Reference of figures:
1. Olfactory dysfunction during COVID-19 pandemic
Pérdida del sentido del olfato durante la pandemia COVID-19
Adriana Izquierdo-Domínguez María Jesús Rojas-Lechuga Joaquim Mullol Isam Alobid
2. Neurosurgical Atlas: Olfactory Groove Meningioma 2020





Materials and Methods:

This cross-sectional study was conducted at Iran's largest tertiary referral center from January to April 2021. All underwent SARS CoV-2 RNA quantitative reverse transcription-polymerase chain reaction viral detection via nasopharyngeal swab. Patients who tested positive were enrolled in the study. Individuals with preexisting olfactory dysfunction, or those requiring intensive care, were excluded. Thus, participant included outpatients with COVID-19 (n=900) and inpatients with COVID-19 pneumonia who were not in intensive care (n=144). Collected data from medical records were statistically analyzed using SPSS 26.0.

Results

All participants completed the initial anosmia questionnaire. The mean age was 55.2±10.5 years. 65% of participants were male, and 35% female. Among COVID-19-positive patients, 65 of 144 (45.1%) inpatients and 360 of 900 (40%) outpatients with COVID-19 reported olfactory dysfunction, at an overall rate of 40.7 %. The COVID-19-positive outpatients and inpatients reported 11% and 19% consequent medical comorbidities, respectively. Other otolaryngologic findings were also reported, including ageusia (29.7%), vertigo (12.8%), headache (34.1%), and dizziness (26.1%).

Conclusion:

Anosmia represents a ubiquitous clinical finding in COVID-19 patients. Current evidence suggests that SARS-CoV-2-related anosmia may be a new viral syndrome specific to COVID-19; otolaryngologists must be aware of this important finding in medical examinations.

Acknowledgments

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