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A study of most common ENT presentation in COVID -19 third wave experienced from a tertiary care hospital in Chennai.

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ABSTRACT
BACKGROUND - Coronavirus disease 2019 (COVID-19) is a communicable disease caused by a virus, the severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2). The first known case was identified in Wuhan, China, in December 2019. The disease quickly spread worldwide, resulting in the COVID-19 pandemic
AIM - To observe the symptomology related to ENT during covid 19 pandemic third wave experienced from a tertiary health care hospital in Chennai.
MATERIALS AND METHOD - A cross sectional study using a questionnaire will be circulated among patients (sample size - 60) at saveetha medical college and hospital using an anonymous, self administered, pre tested questionnaire with semi structured multiple choice questionnaire on symptoms due to covid -19 during the third wave from February- April 2022. The questionnaire consists of 10 questions related to the same. The demographic details such as gender , age etcetera will be calculated and evaluated. The completed questionnaire will be collected and evaluated using appropriate statistical tools .
RESULTS- On the statistical analysis of the data collected, the symptomatology of cough was found to be 66.7%, fever 90% ,cold 75% which were majorly upper respiratory tract infection symptoms.
CONCLUSION- The most common ENT presentations of the third wave of COVID 19 includes cough fever and cold majorly upper respiratory tract symptomatology
KEYWORDS- COVID 19, cough, fever ,cold, third wave

I. INTRODUCTION

Coronavirus disease 2019 (COVID-19) is an infectious disease caused by a novel beta-coronavirus known as Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2). The majority of virus-infected individuals will experience a mild to severe respiratory disease and will recover without the need for expertise care. However, some people develop serious infection which can lead to hospital admission. Serious sickness is more likely to strike older persons and those with underlying medical illnesses including cancer, diabetes, cardiovascular disease, or chronic respiratory diseases. COVID-19 can cause anyone to become very ill or decease at any age.[1]

Fever and dry cough are among COVID-19's most prevalent symptoms. Fatigue and other, less frequent symptoms that some people may experience include as follows: A loss of smell , Nasal obstruction, Ocular inflammation (also known as red eyes) ,Throat pain , Headache, Joint or muscle discomfort ,Various skin rash types, GI Reflux or nausea, Diarrhoea, and can also develop vertigo. Severe COVID-19 illness symptoms include: Breathing problems, loss of appetite, Confusion,[11] Ongoing discomfort or pressure in the chest, hyperthermia (over 38 °C). Other, less typical signs include: Irritability, Confusion, Reduced awareness (sometimes associated with seizures), Anxiety, Depression, Disorders of sleep, Severe and uncommon neurological side effects such strokes, inflammation of the brain, psychosis, and nerve damage. (1,2,3) All ages of people should consult and get medical advice, when they develop these symptoms which includes fever, cough, shortness of[15] breath, pressure at the chest, or loss of speech or motor function. Call your healthcare provider or emergency a helpline, or a healthcare facility so that they can direct you to the appropriate clinic and get medical attention .Being knowledgeable about the illness and the virus's propagation is the best strategy to stop or slow down the disease transmission. By keeping a distance of at least one metre between

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people(social distancing), donning a mask that fits properly, and often washing your hands or using an alcohol-based rub, you can prevent infection in both yourself and also for other people. When it's your turn, get your vaccination, and abide by any local advice.

The COVID-19 pandemic has triggered a general lock-down in most of the world, leaving the general sense that the only resource that people has is to self-help, self-care and self-medicate (6). Doctors have a high risk of acquiring COVID-19 infection, due to repeated occupational exposure, long working hours, stress and fatigue and long time exposure to the disease can lead the symptoms above said at the study is conducted at Saveetha medical college and hospital, Chennai.

AIMS AND OBJECTIVES:

- To observe the symptomology related to ENT during covid 19 pandemic third wave experienced by patients from a tertiary health care hospital in Chennai.

II. MATERIALS AND METHODS :

It was an cross-sectional study, which was performed from January 2022 to June 2022 at Saveetha medical college and hospital, Chennai. Sample size was estimated to be around 60 and it was universal sampling, patients included were with various symptoms of COVID-19 from the hospital. Informed consent was taken from the participants and it was completely on voluntarily basis.

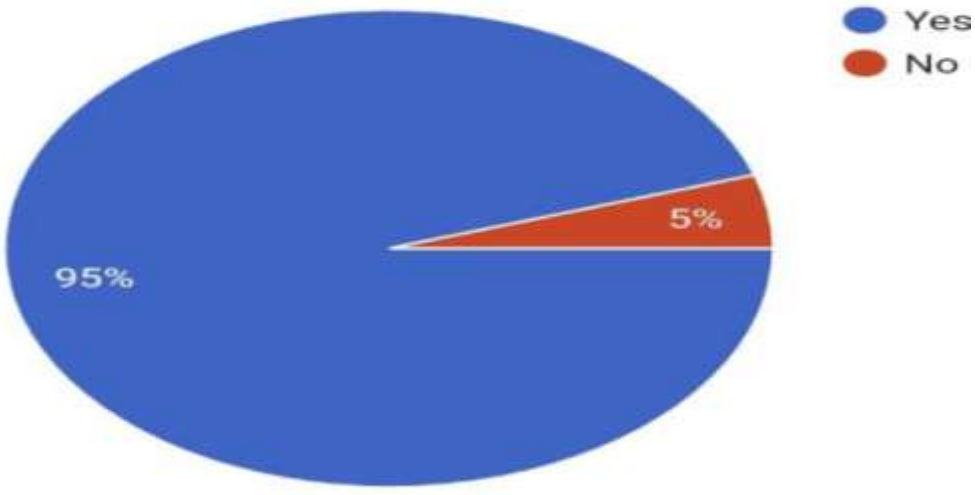
An online questionnaire in a Google form was sent to all the participants either by Email, WhatsApp, Facebook, Messenger or to their registered phone numbers. The shared questionnaire was made anonymous ensuring data confidentiality and reliability. This form includes multiple- choice questions with the options of selecting either one or more responses (Supplementary material). The survey questions ,included about the patient's demographic details, vaccination status, symptoms of COVID 19 which they acquired during the third wave and also the history of COVID 19 disease.

- ✔ The section on demographic characteristics included sex and age
- ✔ Vaccination status includes what type of vaccine, fully or partially vaccinated and also the infection status before and after the vaccination
- ✔ History of covid 19 disease includes the month they got infection with the disease, place of quarantine, did they have any hospital or ICU admission.
- ✔ Symptoms of COVID 19 includes cough, fever, cold, headache, body pain ,loss of smell, loss of taste, tiredness, loose stools , nausea

The data was collected and entered in MS EXCEL and statistical analysis was done.

III. RESULT

The below pie chart describes the place of isolation and treatment of their illness 98.3% of patients were treated with simple medications at home and the rest of the people were treated in the hospital.



International Journal Dental and Medical Sciences Research
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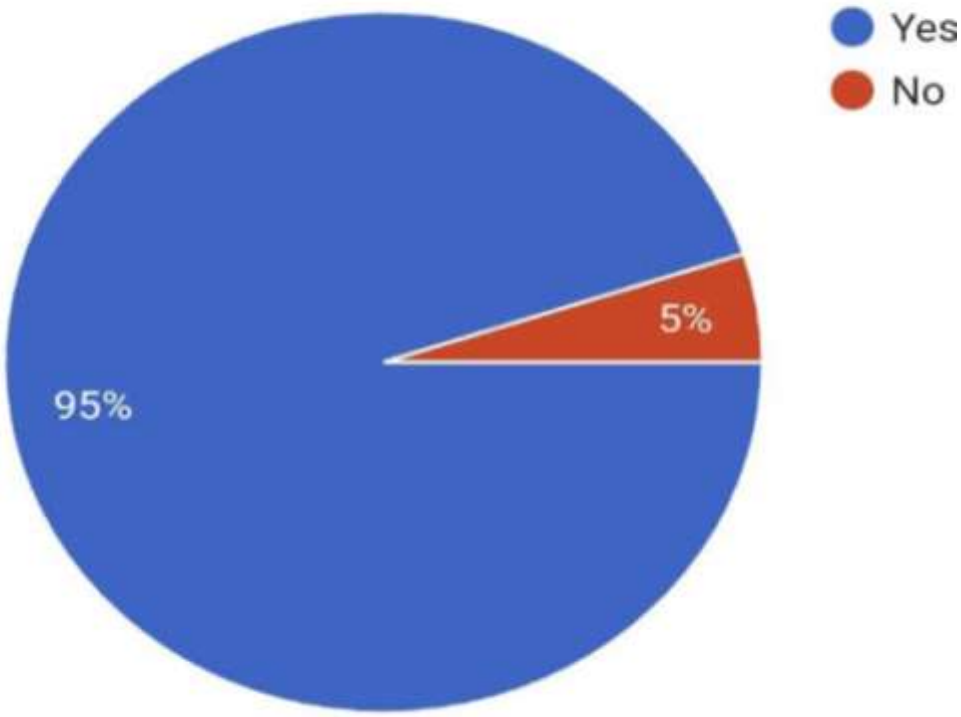
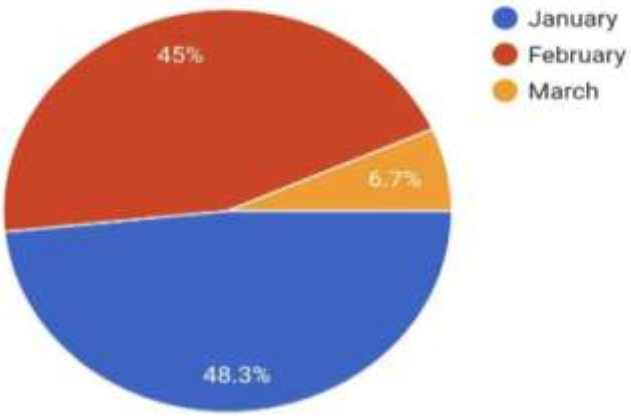
The below pie chart describes the vaccination status of the patients out of 60 patients 95% of the patients were fully vaccinated and the rest 5% of patients were not vaccinated.



The below described pie chart describes of the month affected with the disease majorly the people (48.3%) were infected in the month of January which was the start of the third wave of the pandemic and (45%) of them affected in February and 6.7% of patients were infected in March.



The below described bar graph indicates the major symptoms which was experienced by different age groups.

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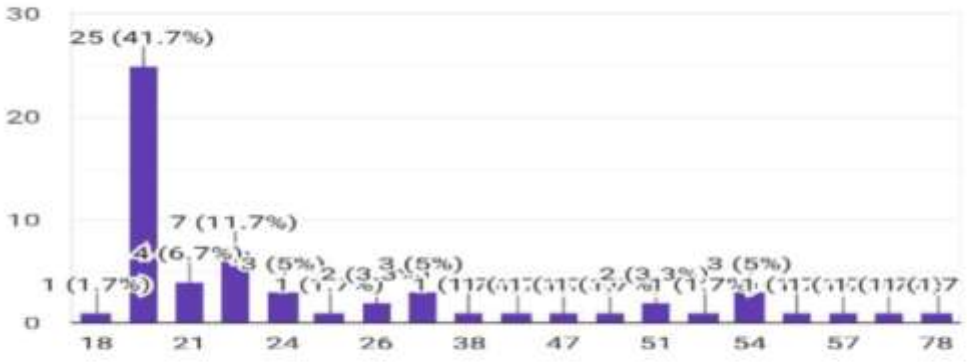
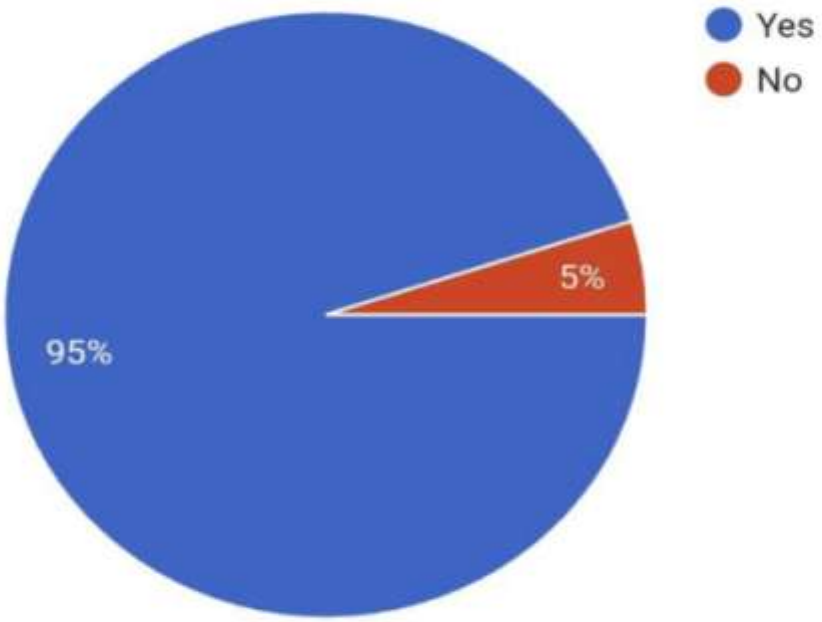


The below described pie chart indicates that the majority (95%) of the population contracted COVID-19 infection after receiving the vaccine.



The below described pie chart indicates that 61.7% of males and 38.3% of females were affected by COVID-19 infection during the third wave.

The below described bar graph indicates that the major symptomology observed during the third wave of the pandemic are cough (66.7%), fever (90%) and cold (75%) which are upper respiratory tract infection symptoms.

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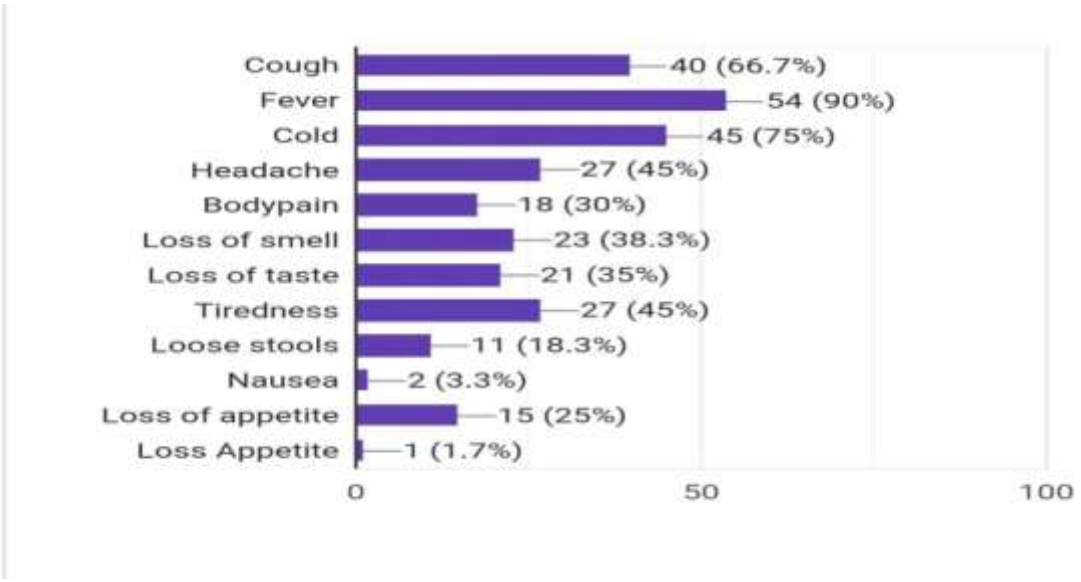
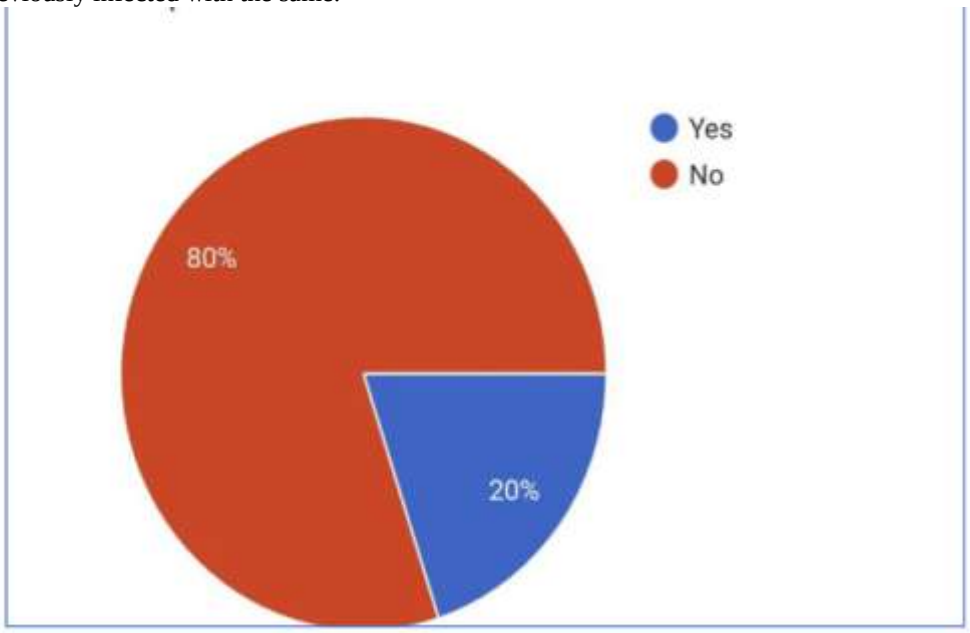


The below described pie chart indicates that 80% of those who contracted COVID-19 infection during the third wave were previously infected with the same.



The below pie chart indicates that 86.7% of the study group were vaccinated with COVISHIELD vaccine and 5% were vaccinated with COVAXIN

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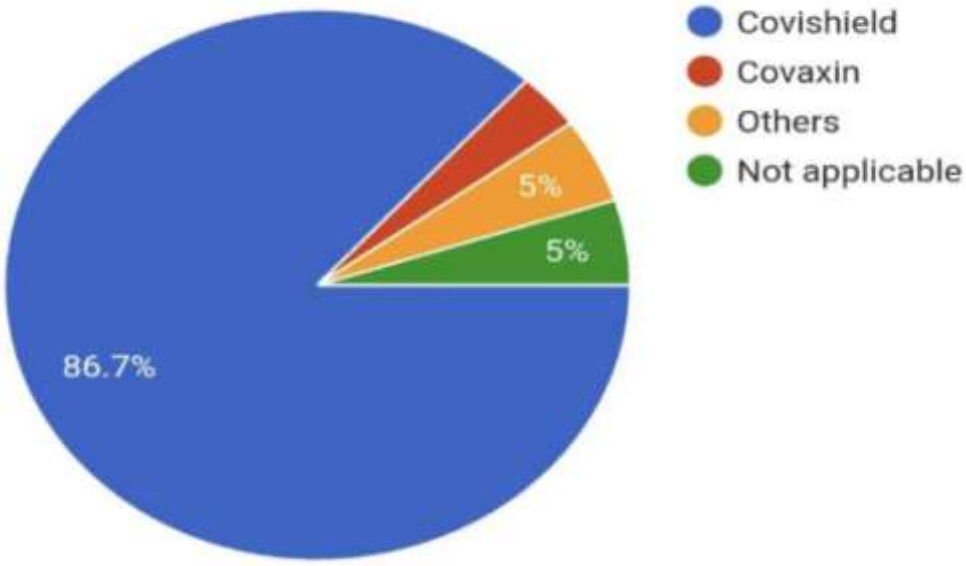

IV. DISCUSSION

In December 2019, a novel corona virus epidemic caused by the severe acute respiratory syndrome corona virus emerged from China. On February 11 2020 WHO declared the disease caused by this new virus. The nasal and nasopharyngeal swab was taken and Real time polymerase chain reaction was used as the diagnostic modality, for the extent of the infection in the lung CT scan was used as the modality.[1]

This study was aimed to estimate the common ENT symptomatology observed in third wave COVID 19 pandemic and also the vaccination status and treatment modality used in the treatment of COVID-19 amongst the patients in Saveetha medical college and hospital, Chennai. Though self-medication for minor illnesses is approved WHO, but with caution[7]. The results which was arrived in my study was mostly coinciding with the research done by Mohamed[1]. Knowledge of ENT symptomatology can limit the viral transmission[20].

Majorly study conducted by other researchers indicated loss of smell to be the most common ENT symptom, but in our study loss of smell was also there for significant amount of people.[6] generally the SARS COV 2 virus binds with the ACE receptors causing the significant pathogenesis and resulting in the symptomatology. Lack of eye protection also lead to significant redness and infection the same [4].

Covid 19 infection also lead to significant hearing loss because of its effects on the auditory system[3]. In our study, the major symptomology of COVID 19 third wave was majorly cough, cold and fever which were upper respiratory tract infection symptoms. Although all symptoms were assessed the previously mentioned symptoms were more dominantly observed.[2]

As the main harbouring site of the virus is the oropharyngeal and nasopharyngeal mucosa , it led to various widespread symptoms of ear , nose and throat. General symptoms like fever , sore throat, myalgia were also significantly seen amongst patients.[8]

Rapid increase in the number of COVID 19 patients led to an increased mortality due to burden on the healthcare systems. Hence, early diagnosis and isolation was essential. For early identification, ENT symptomology was immensely useful. According to studies conducted by various researchers , the most common symptomology included rhinorrhoea, sneezing , cough, loss of smell , loss of taste which was in par with our studies.

V. CONCLUSION

In the study conducted amongst patients attending the tertiary health care centre, most of

them presented with fever, cough and cold which were predominantly upper respiratory tract infection symptoms, during the third wave of COVID 19 pandemic. These symptoms which the patients presented with , were used for early identification, diagnosis and treatment , resulting in good prognosis and prevented fatal complications

REFERENCES

[1]. Mohammad Waheed El-Anwar, Saad Elzayat, Yasser Ahmed FouadAuris Nasus Larynx 47 (4), 559-564, 2020 ENT manifestation in COVID-19 patients

[2]. Joanna Krajewska, Wojciech Krajewski, Krzysztof Zub, Tomasz Zatoński European Archives of Oto-Rhino-Laryngology 277 (7), 1885-1897, 2020 COVID-19 in otolaryngologist practice: a review of current knowledge

[3]. D Lu, H Wang, R Yu, H Yang, Y Zhao Journal of Hospital Infection 104 (4), 454-455, 2020 Integrated infection control strategy to minimize nosocomial infection of coronavirus disease 2019 among ENT healthcare workers

[4]. Frédéric Lapostolle, Elodie Schneider, Isabelle Vianu, Guillaume Dollet, Bastien Roche, Julia Berdah, Julie Michel, Laurent Goix, Erick Chanzy, Tomislav Petrovic, Frédéric Adnet Internal and emergency medicine 15 (5), 813-817, 2020 Clinical features of 1487 COVID-19 patients with outpatient management in the Greater Paris: the COVID-call study

[5]. Banu Kumar, Patrick Scheffler Pediatric Annals 50 (7), e277-e281, 2021 Ear, nose, and throat manifestations of COVID-19 in children

[6]. Mohammad Waheed El-Anwar, Mohamed Eesa, Waleed Mansour, Lamia G Zake, Ehsan Hendawy International Archives of Otorhinolaryngology 25, 343-348, 2021 Analysis of ear, nose and throat manifestations in COVID-19 patients

[7]. Hironya Borah, Sunita Das, Abhilasha Goswami Indian Journal of Otolaryngology and Head & Neck Surgery, 1-4, 2021Otorhinolaryngological manifestations and its management in COVID 19 patients

[8]. Andrea Lovato, Cosimo De Filippis Ear, Nose & Throat Journal 99 (9), 569-576, 2020 Clinical presentation of COVID-19: a systematic review focusing on upper airway symptoms

[9]. Jerome R Lechien, Carlos M Chiesa-Estomba, Daniele R De Siati, Mihaela Horoi, Serge D Le Bon, Alexandra Rodriguez, Didier Dequanter, Serge Blecic, Fahd El Afia, Lea Distinguin, Younes Chekkoury-Idrissi, Stéphane Hans, Irene Lopez Delgado, Christian Calvo-Henriquez, Philippe Lavigne, Chiara Falanga, Maria Rosaria Barillari, Giovanni Cammaroto, Mohamad Khalife, Pierre Leich, Christel Souchay, Camelia Rossi, Fabrice Journe, Julien Hsieh, Myriam Edjlali, Robert Carlier, Laurence Ris, Andrea Lovato, Cosimo De Filippis, Frederique Coppee, Nicolas Fakhry, Tareck Ayad, Sven Saussez European Archives of Oto-rhino-laryngology 277 (8), 2251-2261, 2020 Olfactory and gustatory dysfunctions as a clinical presentation of mild-to-moderate forms of the coronavirus disease (COVID-19): a multicenter European study

[10]. Jamil N Al-Swiahb, Mohammed A Motiwala SAGE open medicine 9, 20503121211016965, 2021 Upper respiratory tract and otolaryngological manifestations of coronavirus disease 2019 (COVID-19): A systemic review

[11]. Maria Rosaria Barillari, Luca Bastiani, Jerome R Lechien, Giuditta Mannelli, Gabriele Molteni, Giovanna Cantarella, Nicola Coppola, Giuseppe Costa, Eleonora MC Trecca, Calogero Grillo, Ignazio La Mantia, Carlos M Chiesa-Estomba, Claudio Vicini, Sven Saussez, Andrea Nacci, Giovanni Cammaroto Journal of medical virology 93 (2), 983-994, 2021 A structural equation model to examine the clinical features of mild-to-moderate COVID-19: A multicenter Italian study

[12]. Erdal Sakalli, Dastan Temirbekov, Esra Bayri, Esra Ergun Alis, Selcuk Cem Erdurak, Mesut Bayraktaroglu American Journal of Otolaryngology 41 (6), 102622, 2020 Ear nose throat-related symptoms with a focus on loss of smell and/or taste in COVID-19 patients

[13]. Anneclaire V Vroegop, Anne-Sophie Eeckels, Vincent Van Rompaey, Dirk Vanden Abeele, Michele Schiappoli, Isam Alobid, Thomas Hummel, Clotilde De Dorlodot, Patrick Levie, Caroline Huart, Philippe Eloy, Olivier M Vanderveken, Peter Hellings, Philippe Rombaux, Philippe Gevaert B-ENT 16 (1), 81-85,

2020 COVID-19 and olfactory dysfunction: an ENT perspective to the current COVID-19 pandemic

[14]. Chong Cui, Qi Yao, Di Zhang, Yu Zhao, Kun Zhang, Eric Nisenbaum, Pengyu Cao, Keqing Zhao, Xiaolong Huang, Dewen Leng, Chunhan Liu, Ning Li, Yan Luo, Bing Chen, Roy Casiano, Donald Weed, Zoukaa Sargi, Fred Telischi, Hongzhou Lu, James C Denneny III, Yilai Shu, Xuezhong Liu Otolaryngology–Head and Neck Surgery 163 (1), 121-131, 2020 covid19 approaching otolaryngology patients during the COVID-19 pandemic

[15]. Om Prakash Mehta, Parshal Bhandari, Akshay Raut, Salah Eddine Oussama Kacimi, Nguyen Tien Huy Frontiers in Public Health 8, 582932, 2021 Coronavirus disease (COVID-19): comprehensive review of clinical presentation

[16]. Andrea Lovato, Cosimo de Filippis, Gino Marioni American journal of Otolaryngology, 2020 Upper airway symptoms in coronavirus disease 2019 (COVID-19)

[17]. Müge Özçelik Korkmaz, Oğuz Kadir Eğilmez, Muhammet Ali Özçelik, Mehmet Güven European Archives of Oto-Rhino-Laryngology 278 (5), 1675-1685, 2021 Otolaryngological manifestations of hospitalised patients with confirmed COVID-19 infection

[18]. Vaibhav Kuchhal, Shahzad Ahmad, Priyanka Chaurasia, Pradeep Rawat ENT manifestations in COVID-19 positive patients

[19]. Saee Savtale, Prashant Hippargekar, Sudhir Bhise, Shankar Kothule Indian Journal of Otolaryngology and Head & Neck Surgery, 1-7, 2021Prevalence of otorhinolaryngological symptoms in Covid 19 patients

[20]. Swapnil Gosavi, Sivasubramaniam Nagarajan, Nirali Jayant Shah, Neelikattu Aathira Tess Thomas, Kalpana Rajiv Kumar, Vaishali Sangole Indian Journal of Otolaryngology and Head & Neck Surgery, 1-6, 2021 ENT symptomology in active COVID-19 patients in our tertiary care centre