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COVID-19 OTOLARYNGOLOGICAL SYMPTOMS

Abstract

Introduction: We detect, analyze and discuss the different ear nose throat (ENT) manifestations those were reported in COVID19 hospitalised patients in the university hospital of Burgas. [1]

Aim: The aim of the study is to find common ENT symptoms for developing the disease in COVID19 positive patients. [2]

Materials and methods: We made a questionnaire among the hospitalized patients and a research in the PubMed databases, Web of Science and others.

Results: Within the included 98 COVID-19 laboratory - confirmed positive patients, the most common ENT manifestations of COVID-19 was sore throat (15%). Other common otorhinolaryngological manifestations of the disease were - pharyngeal erythema, runny nose, nasal congestion, enlargement of the tonsils, infection of the upper respiratory tract.

Conclusions: As a conclusion we can say that ENT manifestations for COVID-19 are not common as fever and cough. Nevertheless the disease is still spreading and with all the mutations we should continue the evaluation of the clinical manifestation. [3]

Key words: COVID19, ENT, symptoms, manifestations, ear, nose, throat

Introduction

The Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2), firstly known as the 2019 novel Coronavirus (2019-nCoV), started in Wuhan in China at December 2019 . Since that moment, the new virus, also known as COVID-19, has dramatic spread all over the world crossing all countries' borders till the World Health Organization (WHO) confirmed it as a pandemic disease on March 11, 2020 [4]. The COVID-19 is part of the species of the SARS-related coronaviruses that have led to previous epidemics over the last two decades as SARS-CoV in 2002–2003 in China and the Middle East Respiratory Syndrome (MERS-CoV) in 2012–2013 in Saudi Arabia [5]. The COVID-19 is presented mainly by lower respiratory tract related symptoms such as fever, cough, dyspnea and chest tightness that could progress rapidly to acute respiratory distress syndrome (ARDS). However, COVID-19 causes also different upper respiratory tract related symptoms including nasal congestion, sore throat and smell dysfunction [6]. The available data on the ear nose throat (ENT) manifestations of COVID-19 is sparsely published and out of the best of our knowledge, no previous review study to collect and describe the ORL manifestation in COVID-19 positive patients. Thus, the aim of the current work was to detect and discuss the different otorhinolaryngology (ORL) manifestations those were reported in COVID-19 positive patients in the reviewed and published literatures and according to the patients hospitalised in infectious disease ward in UMHAT Burgas.

Materials and methods

We made a questionnaire that was given to all patients positive for COVID 19 and hospitalised in the infectious disease ward for a period of 8 months (03.2020 –

09.2020). We searched several medical databases, including PubMed databases, Web of Science and Cochrane Library.

Results

Within the included 98 COVID-19 laboratory - confirmed positive patients, the most common ENT manifestations of COVID-19 was sore throat (15%). Other common otorhinolaryngological manifestations of the disease were - pharyngeal erythema, runny nose, nasal congestion, enlargement of the tonsils, infection of the upper respiratory tract. In the analyzed studies we found that non-ENT manifestation were the main and much more common than the ENT manifestations including fever (73%), cough (61%), expectoration (24%). No reported sneezing, epistaxis, post nasal discharge, facial edema or tenderness, diminution of hearing, vertigo, hoarseness, or stridor. So the most common ENT manifestations for COVID-19 were sore throat (11.3%) and headache (10.7%). It was found that the incidence of the ENT manifestation in COVID-19 patients is not as high as fever and cough. But, it was reported that nasal congestion (4.1%) and pharyngeal erythema (5.3%) were reported to occur in nearly similar incidence to the occurrence of diarrhea in those patients (4.2%).

Discussion

The widespread distribution and infectivity of COVID-19 make it an important pathogen with an unrestricted health threat [7]. COVID-19 manifests with a wide clinical spectrum ranging from no symptoms to septic shock and multi-organs dysfunctions [8]. Despite its rapid spread worldwide, the clinical characteristics of COVID-19 remain to a large extends vague [9]. The nasal, nasopharyngeal and/or the oropharyngeal tissue is one of the main harbor sites of the infection, main site of taking the sample for testing and a main source of transmission of infection.

However, most published COVID-19 researches are focused on the lower respiratory tract manifestation and sequels due to their life-threatening nature. While, the literature on ENT manifestation during COVID-19 infection is still sparse, thus, there is value in studying ENT manifestations of such novel virus and there is a need to identify the defining ENT epidemiological and clinical characteristics with more precision. All the reported ENT manifestations in COVID-19 patients are nonspecific and so could be easily missed and no emergency ENT symptoms as bleeding per nose or throat or stridor was reported in COVID-19 cases. Post viral anosmia is one of the chief reasons of smell dysfunction in adults (40% of cases of anosmia).[10] We made a study that was not completely objective about the result if there any correlation between the severity of the COVID 19 infection and the anosmia.

Conclusion

ENT manifestations for COVID-19 are not common as fever and cough. But, a universal questionnaire using well-defined COVID-19 manifestations is needed to make the COVID-19 data precisely defined, complete and homogenous.

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