Volume 1, Issue 8, November 2023 ISSN (E): 2938-3765

OTOLARYNGOLOGICAL MANIFESTATIONS OF COVID-19 IN MADINAH DISTRICT PATIENTS, BASRAH, IRAQ

Haider Kadhem Saeed (1),
Ziyad Tariq Malghooth (2),
Rafad Abdulazeez Adduljaleel (3)

(1) Otolaryngologist, Alsadar Teaching Hospital, Basrah health directorate, Lecturer at Alzahra College of Medicine, university of Basrah, Basrah, Iraq

(2) Respiratory physician, Basra Teaching Hospital, Basra Health directorate, Basra, Iraq

(3) Otolaryngologist, Almadinah General Hospital, Basrah Health directorate, Basrah, Iraq

Corresponding Author:
Dr. Haider Kadhem Saeed,
Lecturer at Alzahra College of Medicine, University of Basrah, Basrah, Iraq
Mobile No.: 07705757688
Email: haiderkadhem2012@gmail.com

Abstract

Objective: To find out the presence of otorhinolaryngological symptoms in PCR confirmed Covid-19 patients in Almadinah district, Basra, Iraq.

Materials and Method: 450 patients with confirmed Corona Virus Disease (PCR positive for SARS-CoV-2) in Almadinah district at north Basra, Iraq were included in this study. Those patients either were showing various symptoms and picked up during Hospital visits or asymptomatic contacts who were found by active screening of contacts. The study was performed at Almadinah General hospital from 25th of March 2020 tell 25th of July 2020.

Results: patients mean age was 40.2 ± 16.37 years (range: 3-93 years). Of the total 450 patients, 326 patients show various symptom(s) of SARS-CoV-2 infection representing (72.4%), while the remaining 124 patients representing (27.6%) showed no symptoms during the period before or after diagnosis. The otolaryngological symptoms were present in a small percentage of those patients as follow: sore throat (26.7%), anosmia (19.1%) and runny nose (11.6%). The main presenting symptoms if present were the respiratory symptoms as cough (75.7%) and fever present in (77.6%) of those patients.

Conclusion: The frequency of otolaryngological symptoms in COVID-19 patients in Almadinah, Basra is low comparing to cough, fever and other main respiratory symptoms.

Introduction

The World Health Organization (WHO) used the term 2019 novel coronavirus to refer to a corona virus that affect the lower respiratory tract of patients with pneumonia in Wuhan, China on 29 December 2019 [(1)] .The WHO announced that the official name of the 2019 novel coronavirus is coronavirus disease (COVID-19), and the current reference name for the virus is severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2).[(2)] Cases of COVID-19 have now been reported in more than 120 countries worldwide, and the WHO declared it a pandemic on 11 March 2020. [(3)] In Iraq, the 1st case of COVID-19 was recorded in Najaf city on 24th of February 2020,

Web of Medicine: Journal of Medicine, Practice and Nursing
webofjournals.com/index.php/5

while the 1st reported COVID-19 case in Basra was recorded in 29th of February 2020. The major symptoms of Coronavirus disease 19 are of lower respiratory tract infection, but otolaryngological symptoms were recorded in some cases among other upper respiratory tract infection. (4)
In this study, we will record the presenting otolaryngological symptoms as sole or in combination with other main symptoms among all COVID-19 patients in Almadinah district Basra, Iraq.

MATERIALS AND METHOD:

Study design and setting: This prospective, descriptive study was done at the Infection control unit and the corona quarantine word in Almadinah General Hospital, Basra, Iraq.

Patients: The study population were patients with PCR positive SARS-CoV-2 Corona virus disease 19 in Almadinah district, Basra, Iraq during the period from March 25th 2020 tell July 25th 2020.

Data collection: The data were collected by reviewing hospital records and patients sample data either in infection control unit or the quarantine word in Almadinah General hospital. The patient's identities kept hidden and approval from the hospital directory, ethical and legal sections were obtained.

Statistical analysis: The data were analyzed using the SPSS (SPSS Inc., Chicago, IL, USA) version 26.

RESULTS:

Four hundred fifty patients were enrolled in this study (246 [54.7%] males and 204 [45.3%] females). The mean age of the studied population was 40.2 ± 16.37 years (range: 3-93 years).
Of the 450 patients enrolled in this study, 72.4 % representing 326 patients developed a variety of symptoms of COVID-19 while 27.6% representing 124 patients were asymptomatic and were discovered either during active surveillance of the COVID-19 patients contact or during routine hospital visit for various complain, as shown in figure [1].

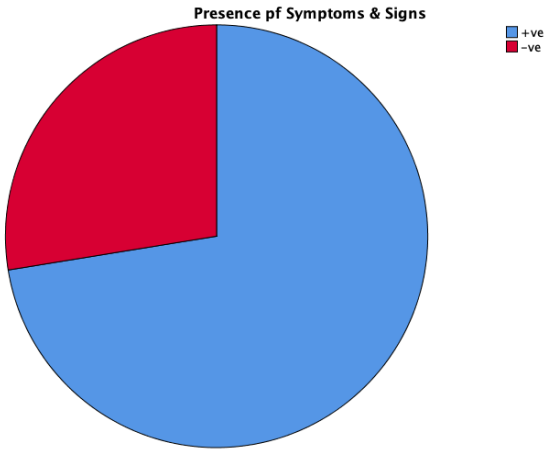

Figure [1]: frequency of symptomatic to asymptomatic patients in Almadinah General hospital.

Otolaryngological symptoms was found as the sole presentation of COVID-19 patients in very low percentage in our study as only 24 patients had pure ENT symptoms (mainly sore throat) representing 7.4% of symptomatic patients and 5.3% of the total patients. Otolaryngological

Web of Medicine: Journal of Medicine, Practice and Nursing
webofjournals.com/index.php/5

symptoms in combination with other COVID-19 symptoms primarily the lower respiratory tract symptoms are noticed and the commonest ENT symptom was sore throat found in 87 patients representing 26.7% of symptomatic patients and 19.3% of the total COVID-19 patients. Other otolaryngological symptoms are shown in table [2].

Table [2]: frequency of otolaryngological symptoms in COVID-19 patients in Almadinah district.

S	ENT Symptom	Frequency	% from symptomatic patients	% from total No. of patients
1	Sore throat	87	26.7 %	19.3 %
2	Anosmia	62	19 %	13.8 %
3	Runny nose	38	11.6 %	8.4 %
4	Nasal congestion	7	2.1 %	1.5 %

DISSCUSION:

The 1st COVID-19 case in Almadinah, Basra was recorded in March 25th 2020, since that date cases of COVID-19 were increasingly discovered either through symptomatic presentation of patients or during active surveillances campaigns of suspected individual and contacts done by the brave health workers (doctors, paramedics, nurses, medical assistance, ambulance drivers and other supporting personals) from both Almadinah General Hospital and Almadinah district primary health care departments for more than three continuous months. [5]

We found that presentation of COVID-19 patients with sole ENT symptoms is very low, as only 7.4% of symptomatic patients had one or more otolaryngological symptoms mostly sore throat. This was similar to the finding of Xia W etal [6] and Mao etal [7] which was (5%) and (10-15%) respectively. While El-Anwar etal [8] and Septh etal [9] reported 61.2% and 85-88% respectively had otolaryngological manifestations mainly olfactory dysfunction in form of anosmia. This might be attributed to their use of a questionnaire to check ENT symptoms (particularly anosmia) in the periods before, during and after the COVID-19 infection and hospitalization.

The most common ENT symptom in our study was sore throat, scoring about 26.7% of symptomatic patients. This was similar to the findings of Covid-19 N.E.R.C etal [10] and Xu etal [11] which was 32.1% and 26% respectively. While Team C-NIRS etal [12] and Spiteri etal [13] report 54% and 6.4% of their patients respectively had sore throat. This might be attributed to the large number of COVID-19 patients included in their study comparing to ours.

Our study showed that only 19% of patients had smell dysfunction in form of anosmia, hyposmia or taste dysfunction. This was similar to the finding of Sakalli [14] and Mao etal [7] which was 10.4% and 10.7% respectively. While Lechien etal [15], and Vaira etal [16] reported that smell dysfunctions were 73.1% and 73.6% respectively. This difference is attributed to the small number of patients taken in the second (72 patients) and the duration of symptom development survey before, during and after the diagnosis of COVID-19 infection in those patients.

Nasal congestion and runny nose were a rare presentation in our study, 2.1% and 11.6% respectively. This finding was similar to that of Chang etal [17], Spiteri etal [13] and Chen etal [18] which was 7.7%, 6,4% and 4% respectively. No finding of vast presentation of COVID-19 patients by rhinorrhea and/or nasal congestion/obstruction and/or atypical dyspnea presentation was noted tell the time of writing this paper. [19]

Web of Medicine: Journal of Medicine, Practice and Nursing
webofjournals.com/index.php/5

CONCLUSION

Otolaryngological presentation in patients with COVID-19 in Almadinah, Basra is not common as lower respiratory tract symptoms. The most common presenting ENT symptoms were sore throat and smell dysfunction.

FINANCIAL SUPPORT AND SPONSORSHIP

Nil.

CONFLICTS OF INTEREST

There are no conflicts of interest.

References

1. Report of the WHO-China Joint Mission on Coronavirus Disease 2019 (COVID-19), 16-24 February 2020, https://www.who.int/docs/default-source/coronaviruse/who-china-joint-mission-on-covid-19-final-report.pdf

2. Hamidreza Shirzadfar. (2020). A Review on Novel Coronavirus (Covid-19): Symptoms, Transmission and Diagnosis Tests, Research in Infectious Diseases and Tropical Medicine,

3. WHO Coronavirus disease 2019 (COVID-19) Situation Report 53 2020. https://www.who.int/docs/default-source/coronaviruse/situation-reports/20200313-sitrep-53-covid-19.pdf(accessed May 13, 2020).

4. Vaira LA, Deiana G, Fois AG, Pirina P, Madeddu G, De Vito A, et al. Objective evaluation of anosmia and ageusia in COVID-19 pa- tients: single-center experience on 72 cases. Head Neck 2020.

5. Saeed HK, Tawfeek F, Al Abbasi A, Sultan SS, Taq MM. Retrospective study about fear from COVID-19 that makes the patients reluctant to present to otolaryngology outpatients' clinic in Medina of Basra Province in Iraq. Med J Babylon 2021; 18:312-5.

6. Xia W, Shao J, Guo Y, Peng X, Li Z, Hu D, Clinical and CT features in pediatric patients with COVID-19 infection: different points from adults, Pediatr Pulmonol 2020 May; 55(5):1197-74.

7. Mao L, Wang M, Chen S et al (2020) Neurologic manifesta- tions of hospitalized patients with coronavirus disease 2019 in Wuhan, China. JAMA Neurol. https://doi.org/10.1001/jamaneurol .2020.1127.

8. M.W. El-Anwar, S. Elzayat and Y.A. Fouad, ENT manifestation in COVID-19 patients, Auris Nasus Larynx, https:// doi.org/ 10. 1016/j.anl.2020.06.003.

9. Speth MM, Singer-Cornelius T, Obere M, Gengler I, Brockmeier SJ, Sedaghat AR. Olfactory Dysfunction and Sinonasal Symptomatology in COVID-19: Prevalence, Severity, Timing, and Associated Characteristics [published online ahead of print, 2020 May 19]. Otolaryngol Head Neck Surg. 2020;194599820929185. doi:10.1177/0194599820929185.

10. Covid-19 National Emergency Response Center E, Case Management Team KCfDC, Prevention (2020) Early epidemiological and clinical characteristics of 28 cases of coronavirus disease in South Korea. Osong Public Health Res Perspect 11(1):8–14. https ://doi.org/10.24171 /j.phrp.2020.11.1.03

11. Xu X, Yu C, Qu J, Zhang L, Jiang S, Huang D, Chen B, Zhang Z, Guan W, Ling Z, Jiang R, Hu T, Ding Y, Lin L, Gan Q, Luo L, Tang X, Liu J (2020) Imaging and clinical features of patients with 2019 novel coronavirus SARS-CoV-2. Eur J Nucl Med Mol Imaging. https ://doi.org/10.1007/s0025 9-020-04735 -9

Web of Medicine: Journal of Medicine, Practice and Nursing
webofjournals.com/index.php/5

12. Team C-NIRS (2020) COVID-19, Australia: Epidemiology Report 7 (Reporting week ending 19:00 AEDT 14 March 2020). Commun Dis Intell 2018:44. https ://doi.org/10.33321 /cdi.2020.44.23

13. Spiteri G, Fielding J, Diercke M, Campese C, Enouf V, Gaymard A, Bella A, Sognamiglio P, Sierra Moros MJ, Riutort AN, Demina YV, Mahieu R, Broas M, Bengner M, Buda S, Schilling J, Filleul L, Lepoutre A, Saura C, Mailles A, Levy-Bruhl D, Coignard B, Bernard-Stoecklin S, Behillil S, van der Werf S, Valette M, Lina B, Riccardo F, Nicastri E, Casas I, Larrauri A, Salom Castell M, Pozo F, Maksyutov RA, Martin C, Van Ranst M, Bossuyt N, Siira L, Sane J, Tegmark-Wisell K, Palmerus M, Broberg EK, Beaute J, Jorgensen P, Bundle N, Pereyaslov D, Adlhoch C, Pukkila J, Pebody R, Olsen S, Ciancio BC (2020) First cases of coronavirus disease 2019 (COVID-19) in the WHO European Region, 24 January to 21 February 2020. Euro Surveill. https ://doi.org/10.2807/1560-7917.ES.2020.25.9.20001 78

14. Erdal Sakalli, Dastan Temirbekov, Esra Bayri, Esra Ergun Alis, Selcuk Cem Erdurak, Mesut Bayraktaroglu,cEar nose throat-related symptoms with a focus on loss of smell and/or taste in COVID-19 patients, American Journal of Otolaryngology, Volume 41, Issue 6,2020.

15. Lechien, Jérôme & Estomba, Carlos & Hans, Stephane & Barillari, Maria Rosaria & Jouffe, Lionel & Saussez, Sven. (2020). Loss of Smell and Taste in 2013 European Patients With Mild to Moderate COVID-19. Annals of Internal Medicine. 10.7326/M20-2428.

16. Luigi Angelo Vaira, Giovanna Deiana, Alessandro Giuseppe Fois, Pietro Pirina, Giordano Madeddu, Andrea De Vito, Sergio Babudieri, Marzia Petrocelli, Antonello Serra, Francesco Bussu, Enrica Ligas, Giovanni Salzano, Giacomo De Riu, Objective evaluation of anosmia and ageusia in COVID-19 patients: Single-center experience on 72 cases, 2020 Wiley Periodicals, Inc., wileyonlinelibrary.com/journal/hed, Head & Neck. 2020; 42:1252–1258.

17. Chang LM, Wei L, Xie L, Zhu G, Dela Cruz CS, Sharma L (2020) Epidemiologic and clinical characteristics of novel coronavirus infections involving 13 patients outside Wuhan, China. Jama. https://doi.org/10.1001/jama. 2020.1623.

18. Chen N, Zhou M, Dong X, Qu J, Gong F, Han Y, Qiu Y, Wang J, Liu Y, Wei Y, Xia J, Yu T, Zhang X, Zhang L (2020) Epidemiological and clinical characteristics of 99 cases of 2019 novel coronavirus pneumonia in Wuhan, China: a descriptive study. Lancet 395(10223):507–513. https ://doi.org/10.1016/S0140-6736(20)30211 -7

19. Sheerwan Bahaa Assim, Haider Kadhem Saeed, & Ammar Salih Abbood. (2022). Atypical dyspnea presentation among adult population in Basrah, Iraq. Journal of Pharmaceutical Negative Results, 13(4), 1147–1151.

Web of Medicine: Journal of Medicine, Practice and Nursing
webofjournals.com/index.php/5