

Three Month Follow Up of Probable or Confirmed SARS-CoV-2 Infected Patients to Learn Better Understanding of Post COVID-19 Symptomatology

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ABSTRACT

INTRODUCTION

Post COVID-19 condition occurs in individuals with history of probable or confirmed SARS-CoV-2 infection usually 3 months from the onset of COVID-19 with symptoms that last for at least 2 months and cannot be explained by an alternative diagnosis. Aim of this study is to retrospect three month follow up of probable or confirmed SARS-CoV-2 infected patients to learn better understanding of post COVID-19 symptomatology.

MATERIALS AND METHODS

This was retrospective study. All patients >18 years of age, admitted from July 2020 to June 2021 in multispecialty hospital and critical care center were included in this study. Clinical records were accessed for collecting relevant data. The patients or relatives were telephonically contacted and requested to come to the hospital if possible. If not possible a questionnaire for symptoms was filled by healthcare workers on telephone. The results were assessed in terms of symptoms, any significant complications of COVID-19, any deaths within 3 months.

RESULTS

A total of 433 patients were included. The mean age was 64.28 ± 15.20 years. The most common symptoms at 3 months follow up were fatigue or tiredness on routine exertion followed by breathlessness and cough. 5 patients were died within 3 months of COVID-19 infections. Out of these 2 patients had stroke, 2 patients had AMI and in one patient cause could not be found out. Not a single patient developed severe mucor mycosis requiring surgical intervention. Only 10 patients had to consult for ophthalmic and ENT complaints which were managed conservatively.

CONCLUSION

The most common post COVID sequel was fatigue or tiredness which was disturbing routine work of the patient. Males were more affected than females. Few patients developed diabetes. However, incidence of mucormycosis was very less in these patients.

KEYWORDS

COVID-19, SARS-CoV-2, Fatigue, Dyspnea, Post COVID

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INTRODUCTION

The Coronavirus flare up started in Wuhan in December 2019 and quickly spread across the world. In India first Coronavirus-19 cases detailed in Kerala on January 27, 2020.¹ The World Wellbeing associations pronounced Coronavirus-19 as a worldwide pandemic on eleventh Walk 2020.² COVID (CoV) are an enormous group of infections that cause sickness going from normal cold to additional serious illnesses like center east respiratory disorder. MERS CoV like its ancestors, SARS CoV, Coronavirus can life compromise. The opportunity to recuperation from Coronavirus is exceptionally factor and relies upon age, immunization status and previous comorbidities notwithstanding sickness seriousness. People with gentle contamination are supposed to recuperate somewhat rapidly (for example in something like fourteen days) though numerous people with extreme illness make some more extended memories to recuperation three to a half year. The most widely recognized constant side effects incorporate exhaustion, dyspnea, hack, chest torment, memory issues, and mental shortages. The vast majority who foster Coronavirus completely recuperate, however current proof recommends roughly 10%-20% of individuals experience an assortment of mid and long haul impacts after they recuperate from their underlying sickness. These mid and long haul impacts are on the whole known as post Coronavirus condition or "long Coronavirus." This question and answer session will assist you with seeing more about post Coronavirus condition thus you can pursue informed choices to safeguard yourself and everyone around you. It's memorable critical that how we might interpret post Coronavirus condition, alongside Coronavirus, keeps on advancing.³ Analysts are working with patients who foster post Coronavirus condition to more readily see more about its goal, side effects and impacts. WHO will refresh data and materials as we find out more?

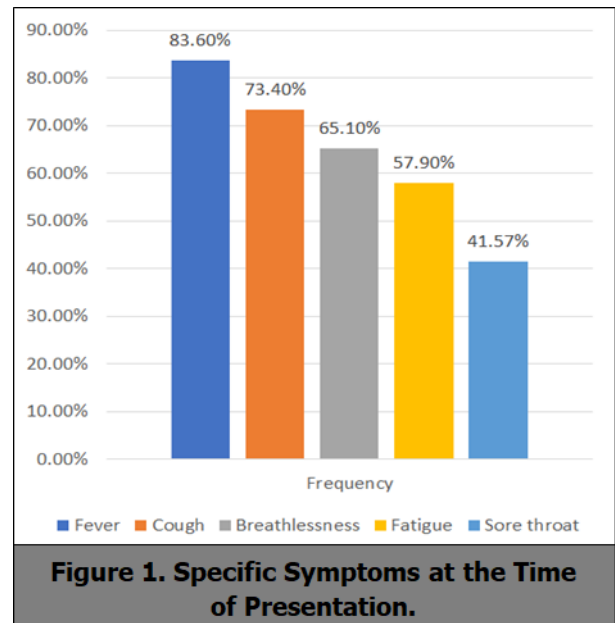
LITERATURE REVIEW

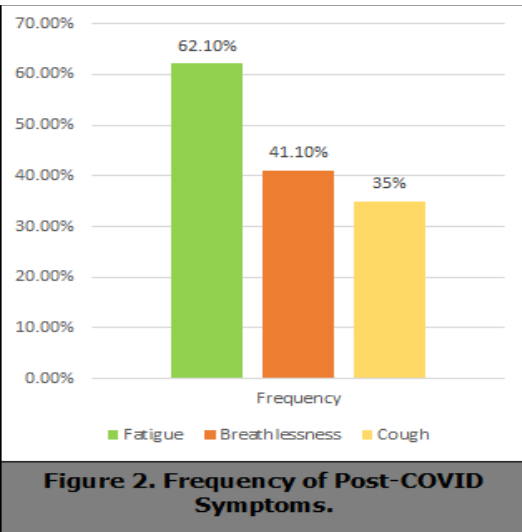
This is a review study led at multispecialty medical clinic and basic consideration place. It was led after endorsement from institutional morals panel. All patients conceded from 11/07 /2020 to 01/06/2021 remembered for the review. Analysis was affirmed either with RT-PCR or HRCT and clinical side effects. Lab boundaries at affirmation incorporates total blood count, blood glucose level, C-responsive protein, D-dimer, renal capability tests, liver capability tests, serum electrolytes, chest x-beam, Chest processed Tomographic examines (CT) when shown, and RT-PCR for Coronavirus were finished. Clinical administration convention for Coronavirus-19 gave by service of wellbeing and family government assistance was followed stringently.⁴ The patient was released as per the MOHFWs release strategy. Follow up visit was exhorted 15 days after release and a few patients were mentioned early subsequent following 5 days relying on condition at release. Second subsequent visit was exhorted following multi month and third subsequent following 3 months. Diabetic, hypertensive patients were habitually followed up. During trail not very far behind first rush of Coronavirus-19 we understood that a few patients are suggestive even following 6 weeks and 90 days. So chose to do review telephonic or in person visit of patient, if conceivable, to concentrate on the post Coronavirus symptomatology. A straightforward poll was shaped and was filled by medical care laborers and information was investigated. Results introduced as mean ± standard deviation for nonstop factors and as rates for

categorical factors.⁵

RESULTS

Review investigation of 433 patients either affirmed by RT-PCR or likely for Coronavirus-19 for post Coronavirus-19 symptomatology was finished. The mean time of patients was 64.28 ± 15.20 years. Out of 433 patients 273 (63.0%) were guys and 160 (36.9%) were females. On review examinations of case records number of patients with gentle, moderate and serious sickness were 120 (27.7%), 212 (48.96%) and 51 (11.77%) separately. The most well-known and explicit side effect at the hour of show was fever in practically 362 (83.6 %) patients, hack in 318 (73.4%), shortness of breath in 282 (65.1%), exhaustion in 251 (57.9%), sore throat in 180 (41.57%) out of 433 patients.⁶ In this study 246 (57%) out of 433 patients recuperated and released from emergency clinic detailed determination of side effects toward the finish of 90 days. Out of these 246 (57%), 142 (33%) patients had a couple of side effects while 103 (24%) had at least three side effects. The most well-known side effects were exhaustion in 153 (62.1%) patients, windedness in 101 (41.1%), hack in 86 (35%) patients. Patients additionally revealed chest torment, body throb, joint agony, irregular migraine. Notwithstanding these side effects, they additionally detailed powerlessness to do routine day to day exercises, absence of certainty contrasted with pre-Coronavirus condition, psychological well-being issues like nervousness, sorrow, apprehension about vulnerability. In patients who had extreme Coronavirus needing Ventilatory help or high stream oxygen treatment lingering side effects were normal. Indeed, even those patients on confirmation were noted to grow long Coronavirus.⁷ There was no measurably massive contrast among male and female patients who grew long Coronavirus. The patients who created neuropsychiatric elements were alluded to specialist (Figures 1 and 2 and Table 1).





Disease severity	Frequency
Mild	120 (27.7%)
Moderate	212 (48.96%)
Severe	51 (11.77 %)

Table 1. This Table Shows the disease severity and Frequency.

DISCUSSION

In this study significant exhaustion was the most well-known side effect toward the finish of 90 days follow up. Over half of patients were experiencing fatigue. There was no relationship between advancement of weakness, Coronavirus seriousness and level of incendiary markers. Female sex and analysis of sadness tension is more normal in those with weariness. The presence of ongoing oxidative pressure, second rate aggravation and disabled heat shock protein creation was among the proposed component for muscle exhaustion. Significant weakness is a test not exclusively to the patient yet in addition the medical care supplier as no genuine strategies to determine it to have conviction. Second most normal side effect was dyspnea. Because of dyspnea a large portion of the patients couldn't continue routine day to day exercises. Contamination with SARS-CoV-2 can prompt different aspiratory confusions like persistent hack, fibrotic lung illness, bronchiectasis and pneumonic vascular disease.⁸ In this study 2 patients experienced intense myocardial areas of dead tissue in no less than 90 days of ailment and capitulated to death. Coronary vein aneurysm, aortic aneurysm, venous and blood vessel thromboembolic infection including perilous pneumonic embolism can likewise occur. Other huge side effects noticed were uneasiness, misery, absence of certainty, sleep deprivation, neurocognitive hardships. Patients created ischemic stroke. Numerous systems have been recommended to make sense of the neurologic harm brought about by SARS-CoV-2 like direct harm to explicit receptors, cytokine related injury, auxiliary hypoxia and retrograde travel along nerve filaments. Clinical assessment of patients with long Coronavirus ought to archive existing issue, its improvement or crumbling and furthermore documentation of new issues, if any. Classification of side effects as per the organ framework included will assist with distinguishing the etiology.⁹ Any new beginning side effects after recuperation from Coronavirus ought to be appropriately addressed to preclude hazardous entanglements like pneumothorax, aspiratory embolism,

coronary corridor sickness and stroke. Treatment of post Coronavirus symptomatology incorporates assessment, indicative treatment, physiotherapy and mental help. Long haul follow up of Coronavirus recuperated patients will toss all the more light into long Coronavirus and its administration. One significant and huge finding is less frequency of mucormycosis in these post Coronavirus patients. As exceptionally wise utilization of steroids, severe glucose control was the critical variables to reduce the event of mucormycosis.

CONCLUSION

The most widely recognized post Coronavirus spin off was weariness or sluggishness which was upsetting routine work of the patient. Guys were more impacted than females. Not many patients created diabetes. Notwithstanding, rate of mucormycosis was extremely less in these patients. Men are two times as liable to foster kind 2 diabetes as ladies. Having overweight or stoutness is viewed as an essential gamble factor for diabetes. In any case, stoutness rates are comparative among people in the U.S. This recommends that the connection between gender, weight, and diabetes might be more nuanced. Blemish 2021 diabetes, particularly type 2, is more normal in guys as opposed to females. Be that as it may, females frequently have more serious difficulties and a more serious gamble of death. Glucose is normally processed and directed at low levels in the blood through the capability of pancreatic chemical called insulin. In excess of 37 million Americans have diabetes (around 1 of every 10), and roughly 90%–95% of them have type 2 diabetes. Type 2 diabetes most frequently creates in individuals over age 45, yet an ever increasing number of kids, adolescents, and youthful grown-ups are likewise creating it.

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