

**A STUDY ON THE FOLLOW-UP CHEST HIGH RESOLUTION
COMPUTERISED TOMOGRAPHY FINDINGS OF COVID-19
POSITIVE PATIENTS AT A TERTIARY CARE HOSPITAL IN
NORTH KARNATAKA**

**By
Dr. TAHA ISMAIL
[20MPG050]**



**SHRI
DHARMASTHALA
MANJUNATHESHWARA
UNIVERSITY**

**Dissertation submitted to the
Shri Dharmasthala Manjunatheshwara University, Dharwad, Karnataka,
In partial fulfilment of the requirements for the award of degree of**

**DOCTOR OF MEDICINE
in
RADIO-DIAGNOSIS**

Under the guidance of

**DR. PREETAM B. PATIL
PROFESSOR & HOD
Department of Radio-Diagnosis**



**DEPARTMENT OF RADIO-DIAGNOSIS
SHRI DHARMASTHALA MANJUNATHESHWARA COLLEGE OF
MEDICAL SCIENCES AND HOSPITAL
Manjushree Nagar, Sattur Colony, Dharwad, Karnataka - 580009**

2020 - 2023

ABSTRACT

Background & Objectives

Little is known about the long-term lung radiographic changes in patients who have recovered from coronavirus disease 2019 (COVID-19), especially those with severe disease. As per the World Health Organisation (WHO) report, approximately 80 percent of patients have mild to moderate symptoms, 15 percent develop a severe form of the disease and about five percent turnout to be critical.

Continued shortness of breath and decreased stamina are responsible in most of the Covid-19 patients whose lungs were attacked by the coronavirus. Early in the pandemic, it was thought that COVID might cause irreversible damage leading to lung fibrosis — progressive scarring in which lung tissue continues to die even after the infection is gone.

This study aimed to determine the efficacy of HRCT thorax findings in the stratification of post-COVID residual lung pathologies.

Methods

In this prospective study, a random sample of adults diagnosed with COVID-19 were assessed three months post-diagnosis. The participants telephonically completed a standardised survey describing their long COVID symptoms, missed workdays, and health-seeking behaviour. Medical records were reviewed for comorbidities, original COVID-19 symptoms, and treatment.

Results

It was noted, at follow-up that 7 (23.3%) of the patients had a CORADS score of 0. While there were 4 patients with CORADS score of 4, at 3rd month follow up as well, there were 4 (13.3%) patients with CORADS score of 5.

Interpretation & Conclusion

Over a half of COVID-19 patients experienced at least one long COVID symptom for two months and nearly 20% needed additional medical treatment. There is a great need for long COVID investigation and treatment in patients. Three-month follow-up CT showed fibrotic-like changes in the lung in more than one-third of patients who survived severe coronavirus disease 2019 pneumonia. These changes were associated with an older age, acute respiratory distress syndrome, longer hospital stays, tachycardia, noninvasive mechanical ventilation, and higher initial chest CT score.

Keywords: long COVID, primary health care, rehabilitation, post COVID-19, India, fibrosis, 42