Typical HRCT Findings in Covid-19 Positive Patients.

Archana Bhatnagar, Prachi Shukla, Pallavi Chaudhary, Mohd Asif

Abstract

Coronavirus disease 2019 is a highly contagious viral illness caused by SARS-CoV-2 and had a catastrophic effect on the world's demographics. HRCT, a highly sensitive and time-effective imaging modality, is a better alternative to RT-PCR as it can detect the subtle changes in lung parenchyma that were otherwise difficult to assess on conventional chest imaging.

Aim - To evaluate the spectrum of HRCT patterns and to assess the CT severity score in COVID-19-positive patients.

Materials and Methods – A prospective observational study was conducted comprising 2000 cases of COVID-19-positive patients who presented to our institution for an HRCT scan between March 2021 and February 2022. The clinical and radiological data were studied and analysed.

Results- The majority of the patients, 25.5%, were 40-49 years old. In our study, peripheral pattern, bilateral and predominantly right-side distribution on HRCT chest was most common. Ground glass opacities were the most common typical finding on HRCT Chest seen in almost 1612(90.11%) of patients, followed by consolidation in 1100(61.5%) patients, interlobular septal thickening in 1009(56.4%) patients, crazy-paving in 682 (38.11%), halo sign in 216(12.1%), reverse-halo sign in 236(13.2%). Among atypical findings, lymphadenopathy was seen in 116(6.5%) patients, followed by pleural effusion in 75 patients (4.2%).

Conclusion – HRCT findings such as ground glass opacities, consolidation, interlobular septal-thickening etc., are found commonly. These imaging patterns help understand the pathophysiology and natural history of infection and the CT severity score in categorising the patient in mild, moderate and severe disease.

Keywords: