Abstract

Background: Although Polymerase-chain- reaction is the gold standard for verifying infection, chest Computed tomography has been demonstrated to be more sensitive for the detection Coronavirus Disease -19, Ground glass opacities, consolidation, or both. Computed tomography findings after a one year linked with continuous symptoms after primary mild- moderate Covid-19 infection.

Aim of the study: This study investigated the chest Computed tomography findings after 12 months of follow-up in patients with persistent respiratory symptoms from previous mild-to-moderate COVID-19 infections to evaluate the association of these symptoms with Computed tomography findings.

Patients and method : This is an observational, cross-sectional study conducted on 150 patients, 93 males and 57 females, aged between 20 and 75 years, who attended the medical Consultation Clinic in Al-Hussien Teaching Hospital during the period from march 2023 to January 2024 in Al Nasiriyah City, Thi-Qar Province, Iraq. All patients had persistent COVID-19 symptoms following an initial mild or moderate illness.

Results: Most of the patients in this study were male (62%), aged between 51 and 75 years (66.67%), whose healthy weight (59.33%), high education level (68.67%), and non-smokers (78.67%). Most of the patients had dry cough (52.67%), and dyspnea (63.33%), while most of them did not have chest pain (63.67%). Most of the patients had normal chest Computed tomography findings (58.67%), and only 41.33% had abnormal chest computed tomography findings, {distributed as unilateral and bilateral findings (16.67% and 24.67%, respectively)}, 17.33% of

patients had interlobular septal thickening; 20% has ground glass opacities ; 12.67% had fibrotic-like changes; 7.33% had reticulation; 4% had consolidation; 7.3% had honeycombing; and 4% had bronchiectasis.

Conclusion: About 41.33% of post- COVID-19 patient who initially had a mild or moderate disease established noticeable abnormalities in their chest computed tomography 12 months after the infection. The presence of persistent respiratory symptoms, especially cough, and chest pain, was found to be associated with various chest Computed Tomography finding.

Key Words: Chest Computed Tomography, Mild – Moderate Covid-19 Infection, Persistent Respiratory Symptoms.