بسم الله الرحمن الرحيم

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تم رفع هذه الرسالة بواسطة / هناء محمد علي

بقسم التوثيق الإلكتروني بمركز الشبكات وتكنولوجيا المعلومات دون أدنى مسئولية عن محتوى هذه الرسالة.

ملاحظات: ....

Three to six-months Follow-up Chest CT Findings after COVID-19 Pneumonitis, incidence of complications and correlation to different risk factors

Thesis

Submitted in Partial Fulfillment of the M.Sc. Degree in ***Radiodiagnosis***

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List of Abbreviations

Abb.	Full term
AA	*Aortic arch*
AFOP	*Acute fibrinous and organizing pneumonia*
AP	*Anteroposterior*
CDC	*Centers for Disease Control and Prevention*
COVID-19	*Coronavirus disease 2019*
CT	*Computed Tomography*
DIC	*Disseminated intravascular coagulation*
ICU	*Intensive care unit*
LA	*Left atrium*
LLL	*Left lower lobe*
LUL	*Left upper lobe*
MDCT	*Multi-detector*
MPR	*Multi-planar reformat*
NGS	*Next generation sequencing*
PIC	*Pulmonary intravascular coagulopathy*
RUL	*Right upper lobe*
SARS CoV-2	*Severe acute respiratory syndrome corona virus-2*
T	*Thickness*

INTRODUCTION

Coronavirus disease 2019 (COVID-19), caused by severe acute respiratory syndrome coronavirus 2, or SARS-CoV-2, has become a global pandemic. As of November 19, 2020, World Health Organization stated that this disease has been found in more than 200 countries. Pathology studies have shown that COVID-19 causes injuries in multiple organs and tissues, with extensive pulmonary involvement similar to that found in other coronavirus infections (ie, severe acute respiratory syndrome coronavirus and Middle East respiratory syndrome coronavirus infection) ***(Xu et al., 2020)***.

Chest CT plays a crucial role in the diagnosis and follow-up of patients with COVID-19 pneumonitis. Numerous studies have documented radiographic changes in the acute course of COVID-19, which range from mild to severe cases ***(Shi et al., 2020; Pan et al., 2020; Bandirali et al., 2020)***. Recent publications ***Han et al. (2020); Wang et al. (2020)*** have found that approximately 94% of hospitalized patients have persistent lung parenchymal findings on their discharge CT scans. In addition they reported that lung opacities in 53 % of patients with mild COVID-19 resolved with no adverse sequelae within 3 weeks after discharge. Data from previous coronavirus infections (ie, severe acute respiratory syndrome and Middle East respiratory syndrome) suggest that there may be substantial fibrotic consequences ***(Zhang et al., 2020);Antonio et al., 2020; Das et al., 2020)*** in patients with COVID-19. However, little is known about the long-term lung changes after COVID-19 infection.

Aim of the Work

To evaluate pulmonary changes on 3-6 months follow-up chest CT scans and to explore the risk factors for fibrotic-like changes in the lung in patients who recovered from COVID-19 pneumonia.