Assessment of Image of CT Scan for Patient with COVID-19

By Dr. Antesar Rheem Obead, Aminah Kadhum Murad & Mohend A.N. Al-Shalah

University of Babylon

Abstract- COVID-19 is a virus that can cause disease. Phylogenetic analysis Bats have been discovered to have a full genome sequence, according to research done with available entire genome sequences. The COVID-19 virus reservoir has been identified, however the intermediate host(s) has yet to be identified now. This study was conducted in Marjan Teaching Hospital in Babylon for all patients infected with Covid 19 disease during January of 2022 and their ages were between 30-55, where the diagnosis was made by CT-scan. The reports that I will mention that the new mutation from Corona does not cause severe damage to the lung, and the infection rate is less than 45% in the lung. She also indicated that all patients were exposed to severe diarrhea without losing the sense of smell and taste. From this, we conclude that the new mutations in Covid-19 are less severe and less severe, and the vaccine reduces a high rate of infection, as most of the vaccinated people had a very weak rate. And here are pictures of the reports of the new mutant from Covid-19 (OMICRON).

Keywords: Covid-19, ct-scan, report.

GJMR-K Classification: DDC Code: 614.57 LCC Code: RC114.5
Assessment of Image of CT Scan for Patient with COVID-19

Dr. Antesar Rheem Obead, Aminah Kadhum Murad & Mohend A.N. Al-Shalah

Abstract - COVID-19 is a virus that can cause disease. Phylogenetic analysis Bats have been discovered to have a full genome sequence, according to research done with available entire genome sequences. The COVID-19 virus reservoir has been identified, however the intermediate host(s) has yet to be identified. Now. This study was conducted in Marjan Teaching Hospital in Babylon for all patients infected with Covid-19 disease during January of 2022 and their ages were between 30-55, where the diagnosis was made by CT-scan. The reports that I will mention that the new mutation from Corona does not cause severe damage to the lung, and the infection rate is less than 45% in the lung. She also indicated that all patients were exposed to severe diarrhea without losing the sense of smell and taste. From this, we conclude that the new mutations in Covid-19 are Less severe and less severe, and the vaccine reduces a high rate of infection, as most of the vaccinated people had a very weak rate. And here are pictures of the reports of the new mutant from Covid-19 (OMICRON).

Keywords: Covid-19, ct-scan, report.

1. Introduction

The current pneumonia outbreak, which began in early December 2019 near Wuhan, is caused by a novel coronavirus (CoV) known as 2019-nCoV or '2019 novel coronavirus' or 'COVID-19' by the World Health Organization (WHO).[1–4] City, Hubei Province, China. COVID-19 is a virus that can cause disease. Phylogenetic analysis Bats have been discovered to have a full genome sequence, according to research done with available entire genome sequences. The COVID-19 virus reservoir has been identified, however the intermediate host(s) has yet to be identified. Now. Though three primary areas of work to a other marketplaces in the vicinity, as well as the gathering of thorough details on the origins and types of wildlife species marketed on the Huanan market, and the animals' final destination after the market [5–8] has been completed.

Coronaviruses are naturally divided into four categories that cause gastrointestinal and respiratory infections: Gammacoronavirus, Deltacoronavirus, Betacoronavirus, and Alphacoronavirus [9–11]. The first two types primarily affect birds, while the third and fourth types primarily affect mammals. Human CoVs have been classified into six categories. These include the Beta corona viruses HCoVHKU1, HCoVOC43, Middle East Respiratory Syndrome coronavirus (MERS-CoV), Severe Acute Respiratory Syndrome coronavirus (SARS-CoV), HCoV229E, and HCoV-NL63, as well as the Alphacoronaviruses HCoV229E and HCoV-NL63. Coronavirus were not widely recognized until the 2003 SARS pandemic [12–14], which was followed by the MERS outbreaks in 2012 [15–17] and, most recently, the COVID-19 outbreaks. SARS-CoV and MERS-CoV are highly dangerous viruses that move from bats to palm civets and dromedary camels, and then to humans.

COVID-19 is transferred via dust particles and fomites when people come into close contact with them between the infector and the person who has been infected COVID-19's airborne distribution has not been recorded, and it is not known to be a substantial transmission engine based on empirical evidence; nonetheless, it is possible that such aerosol-generating organisms could be a significant transmission engine. Medical facilities are used to carry out the procedures. The spread of feces has been observed in a tiny number of clinical cases, and the active virus has been reported in a small number of cases.

Furthermore, it does not appear that the faecal-oral route is a COVID-19 transmission engine; its function and relevance for COVID-19 must be determined. The greatest number of patients (77.8%) for roughly 18,738.58 laboratory-confirmed cases registered as of the second week of April 2020 was between 30 and 69 years of age.21.6 percent of the cases are farmers or employees by occupation, 51.1 percent are men, and 77.0 percent are Hubei.

However, there are already a lot of worries about the new coronavirus. Despite the fact that it appears to be transmitted to people by animals, it is critical to distinguish between particular animals and other sources, the channel of transmission, the incubation period, the characteristics of the susceptible community, and the survival rate. Despite this, there is currently very little clinical knowledge about COVID-19 disease, and details on age range, the virus’s animal origin, incubation time, outbreak curve, viral spectroscopy, dissemination pathogenesis, autopsy observations, and any clinical responses to antivirals are lacking among the serious cases.
II. **Patient and Method**

This study was conducted in Marjan Teaching Hospital in Babylon for all patients infected with Covid-19 disease during January of 2022 and their ages were between 30-55, where the diagnosis was made by CT-scans, where the most important symptoms of the patients were high body temperature, chest pain, Diarrhea, loss of appetite, loss of sense of smell and taste, tiredness, fatigue

a) **CT (Computed Tomography) Scan (Philips Brilliance CT 64 slice)**

Doctors and other healthcare professionals have years of training in their field, but there are still many things they can’t diagnose simply by looking at or listening to your body. Certain medical conditions require a deeper look, usually at the tissues, blood vessels, and bones inside your body. X-rays and ultrasounds can provide some information, but when a more detailed view is required, a computed tomography (CT) scan is usually the next step. In this article, we take a closer look at how a CT scan works, what it’s typically used for, and what the procedure is like.

CT scans don’t require much preparation. If needed, you can do a CT scan with or without contrast very quickly. In fact, this happens in most cases where a CT scan is needed to diagnose traumatic injuries or a stroke. If you’re scheduled for a CT scan with contrast dye, it may help to refrain from eating solid foods for up to 4 hours before your test. This is especially true if your CT scan is being done to get images of your abdomen.

If your doctor is using oral contrast for your CT scan, you’ll probably be given the contrast before the day of your scan and instructed on how to prepare and drink it. Generally, you will want to start drinking the solution within an hour or two of your scan, drinking a portion of the solution every 15 minutes. Your doctor or radiologist will give you specific instructions. If you’re having intravenous (IV) contrast, a catheter will be inserted into your vein when you arrive at the testing facility. Otherwise, the only preparations you need to take before a CT scan are to remove metallic objects and medication devices from your body.

III. **Result and Discussion**

At the beginning of 2022, most countries were exposed to the new mutation of Covid-19, where the reports of those infected with Covid-19 were collected, and I will present them in the results. It included either lying down and receiving treatment in the hospital or outside it. Through the reports that I will mention that the new mutation from Corona does not cause severe damage to the lung, and the infection rate is less than 45% in the lung. She also indicated that all patients were exposed to severe diarrhea without losing the sense of smell and taste. From this, we conclude that the new mutations in Covid-19 are less severe and less severe, and the vaccine reduces a high rate of infection, as most of the vaccinated people had a very weak rate.

And here are pictures of the reports of the new mutant from Covid 19 (OMICRON).
Assessment of Image of CT Scan for Patient with COVID-19

CT scan of the chest (native study):

- Hyperinflated chest with bilateral apical fibrosis and pleural irregularities, no GGO...COVID
- Normal both lungs, no mass lesion.
- Normal trachea and major bronchi.
- No hilar or mediastinal LAP.
- No pleural effusion or pneumothorax.
- Normal cardiac size and normal major vessels.
- Normal chest wall.

CT Scan of Chest (native) (HRCT):

There is accentuation tree in bud appearance in both lower lobes
Minimal Ground glass appearance in both lower lobes more on right side
Picture highly suggested COVID 19 to be correlate with clinical and lab investigation
15% of lung affected
No pleural effusion

Normal both hila
Normal central mediastinum
Normal both hemidiaphragm
**Assessment of Image of CT Scan for Patient with COVID-19**

**CT scan of the chest (native):**
- Normal both lung fields, normal bronchovascular markings, no pulmonary mass.
- Normal trachea and major bronchi.
- No hilar or mediastinal LAP.
- No pleural effusion or pneumothorax.
- Normal cardiac size and normal major vessels.
- Normal chest wall.
- Normal bones

**CT SCAN OF CHEST (native) (HRCT):**
- There is accentuation tree in bud appearance in both lower lobes.
- Minimal Ground glass appearance in both lower lobes more on left side.
- Picture highly suggested COVID-19 to be correlate with clinical and lab. investigation.
- 15% of lung affected.
- No pleural effusion.

- Normal both hila.
- Normal central mediastinum.
- Normal both hemidiahragm.
CT scan of the chest (native study):

- Bilateral apical fibrosis and cavitations (old TB) with bilateral GGO in posterior segments of both lower lobes ...(Covid with lung involvement about 20 %)...
- Normal trachea and major bronchi.
- No hilar or mediastinal LAP.
- No pleural effusion or pneumothorax.
- Normal cardiac size and normal major vessels.
- Normal chest wall.
Assessment of Image of CT Scan for Patient with COVID-19

CT scan of the chest (native study):

- Bilateral apical fibrosis and cavitations (old TB) with bilateral GGO in posterior segments of both lower lobes ...(Covid with lung involvement about 20 %)...
- Normal trachea and major bronchi.
- No hilar or mediastinal LAP.
- No pleural effusion or pneumothorax.
- Normal cardiac size and normal major vessels.
- Normal chest wall.
Assessment of Image of CT Scan for Patient with COVID-19

CT scan of the chest (native study):
- Bilateral apical fibrosis and cavitations (old TB) with bilateral GGO at posterior segments of both lower lobes ...(Covid with lung involvement about 20%)...  
- Normal trachea and major bronchi.
- No hilar or mediastinal LAP.
- No pleural effusion or pneumothorax.
- Normal cardiac size and normal major vessels.
- Normal chest wall.
CT SCAN OF CHEST (native) (HRCT):
There is accentuation tree in bud appearance in both lower lobes
Minimal Ground glass appearance in both lower lobes more on left side
Picture highly suggested COVID-19 to be correlate with clinical and lab. investigation
10% of lung affected
no pleural effusion

normal both hila

normal central mediastinum
normal both hemidiaphragm


