

Short Commentary

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Chest x-ray and Evaluation of Coronavirus Disease

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A chest X-ray is a scan that gives more details in the form of pictures of the inner side of the chest and lungs. A more advanced type of chest x-ray is known as chest computed tomography (CT). It is a painless test that takes clear images of the inner chest, including the lungs. The features for CT chest x-ray are essential in determining and evaluating the diagnosis and management of coronavirus 2019 (COVID-19). The interior features of the chest x-ray are reported and compared to the CT structural features of other viruses to enable the radiologist to evaluate the probable CT sequence patterns of the specific virus [1].

The x-ray images are reviewed together with the clinical information, including the initial and follow-up reports. They are compared with laboratory results to identify the most likely viral infection. The chest CT x-ray images remain to be the most appropriate method that enabled the virologist and the radiologist to differentiate the coronavirus from the other common viral infections. The chest x-ray images assisted in preventing the misdiagnosis between the COVID-19 with different underlying viral diseases such as viral pneumonia and adenovirus [2].

The chest CT features for the coronavirus, which made the radiologist and the virologist suggest the possible emergence of new virus (coronavirus), includes; Ground-glass opacities (GGOs), interlobular septal thickening, a consolidation that occurred with or without vascular expansion and bronchogram signs. The chest CT gave a more accurate diagnosis of coronavirus at a percentage of 3.9% and was suggested as the standard method for diagnosing COVID-19 to uplift the management services of the patients. The chest CT images helped in solving the issue of misdiagnosis and controversies of viral infections, whereby the CT findings showed positive results faster before the laboratory results. The results of chest x-ray film are termed as 'discriminating method' because it determines whether the patient can go home (if normal) or be admitted to the healthcare center, (if there are some pathological findings shown in the film) for observation [3].

The x-rays are used by the radiologist to facilitate, accelerate the exploration and design the specific circuits to give first-hand information in the radiological findings. These reports elaborate on whether there is consistency with the COVID-19 infection. The computed tomography is used in limited case, that is whereby the patients predisposes signs of a high probability of being infected with COVID-19, but his/her polymerase chain reaction (PCR) test is negative. The CT is again applicable to the more complicated

cases which appear abnormal on the chest radiograph, mostly in diagnosing the patient with severe cases while waiting for the PCR results. After analyzing the images of some patients who were already infected with the disease, the radiologist found that the radiography fell dolefully short of computing tomography while selecting out the diseased individuals. The chest CT patterns, due to their efficiency were the most recommended methods in detecting and staging of coronavirus due to the minimal number of appropriate RT-PCR test kits [4].

References

1. Zhao X, Liu B, Yu Y, Wang X, Du Y, et al. (2020) The characteristics and clinical value of chest CT images of novel coronavirus pneumonia Clinical Radiology 5: 335-340.
2. Pan Y, Guan H, Zhou S, Wang Y, Li Q, et al. (2020) Initial CT findings and temporal changes in patients with the novel coronavirus pneumonia (2019-nCoV): a study of 63 patients in Wuhan, China. European radiology 30: 3306-3309.
3. Ye Z, Zhang Y, Wang Y, Huang Z, & Song B (2020) Chest CT manifestations of new coronavirus disease 2019 (COVID-19): a pictorial review. European Radiology 30: 4381-4389.
4. An P, Song P, Lian K, & Wang Y (2020) CT Manifestations of Novel Coronavirus Pneumonia: A Case Report. Balkan medical journal 37: 163-165.

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