

HRCT findings in COVID-19 suspected patients

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ABSTRACT

Background: Aims and Objective are to identify findings of suspected covid-19 patients. **Method:** This prospective cross-sectional study was carried at the radiology department of Sialkot Medical Complex, a private hospital in Sialkot. It included a total of 40 patients during one month and then SPSS was used for statistical analysis to find out the frequency of effected patients. **Results:** Out of 38 patients who were presented with suspicion of COVID in them, 36 patients were found to be having symptoms of COVID in CT scans. 2 patients were normal which are not included in the results.

Conclusion: CT scan (computed tomography) is an excellent modality to identify COVID in a patient. It uses radiation to create image on the screen. It consists of a gantry and a control panel (computer). It has high diagnostic efficiency to identify covid-19.

Keywords: CT scan, computed tomography, COVID-19.

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INTRODUCTION

A flare-up of Covid sickness 2019 (COVID-19) contamination started in December 2019 in Wuhan, in China's Hubei region. [1,2] The International Committee on Taxonomy of Viruses termed the unique Covid extreme intense respiratory disease Covid 2 (SARS-CoV2). Even though the disease presumably started as a zoonotic in the city's seafood market, widespread human-to-human transmission has resulted in approximately 5 million illnesses and 5 lac fatalities globally as of May 2020.[3-7] The disease was first reported in quite some time on January 30, 2020, and as of May 31, 2020, the total number of patients in India had reached 1.9 lac, with 5500 fatalities.[8] Fever and hack are the most commonly recognizable clinical signs at the time, despite other hazy symptoms such dyspnea, migraine, muscular aches, and exhaustion..[9] About 20% of cases are extreme, and mortality is roughly 3%.[10] The World Health Organization pronounced a worldwide wellbeing crisis on January 30, 2020.[11] Prompt acknowledgment of illness is important to guarantee ideal treatment, and, from a general wellbeing viewpoint, quick persistent seclusion is critical for control of this transferable disease.[12] In this review, we discuss chest HRCT findings in 216 COVID-19-infected patients who were treated at our facility and located in Kolhapur District, Maharashtra State, India, up until May 31, 2020. Our review's main goals are to evaluate the types of HRCT findings in COVID-19-contaminated patients, to evaluate the severity of the sickness in light of HRCT findings, and to outline the role of HRCT chest as an insightful decision-making approach for visualizing COVID-19-contaminated patients.

MATERIAL METHODOLOGY

This cross-sectional review was done for a time of multi month. A helpful testing method was utilized for the assortment of information. Complete of 38 patients which came to the radiology office with actual indications of Coronavirus like influenza, hack, SOB (windedness). Patients of all age bunch were enlisted for study. The sweeps were performed by extremely fine technologist and revealed by experienced specialist. Information was gathered and organized of SPSS programming to notice the recurrence of affected patients.

RESULTS

Total 38 patients were enrolled for this study. The mean value of age was found to be 49.55 ± 14.740 with minimum age of 21years and 75years as maximum age range.

In table 1 age group is explained. There is only 1 patient of less then 20 year old and 1 patient of age between 20 to 29 .There are 8 patients of age between 30 to 39, 10 patients between 40 to 49 and 4 patients between 50 to 59. There are 10 patients between the age group of 60 to 69, 3 patients of 70 to 70 and 1 patient of age greater then 79 years old Table 2 explain gender. Out of 38 patients there are 15 males and 23 females. Table 3 explains lung Fields. 31 patients have bilateral lung Fields 1 patient have lateral lung field and 6 patients have no lung field. Out of 38 patients bronchiectasis is present in only 1 patient and absent in 37 patients. Pleural Effusion and lung masses is present in 2 patients , Abcess is present in 1 patient and consolidation is present in 23 patient . CT severity is mild in 22 cases and severe in 11 cases and 5 cases are normal.

Table: 1

		Frequency	Percent
Valid	<20	1	2.6
	20-29	1	2.6
	30-39	8	21.1
	40-49	10	26.3
	50-59	4	10.5
	60-69	10	26.3
	70-79	3	7.9
	>79	1	2.6
	Total	38	100.0

Table :- 2

Gender					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	15	39.5	39.5	39.5
	Female	23	60.5	60.5	100.0
	Total	38	100.0	100.0	

Table 3

Lung Fields					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Lt. lateral	1	2.6	2.6	2.6
	bilateral	31	81.6	81.6	84.2
	none	6	15.8	15.8	100.0
	Total	38	100.0	100.0	

Table 4

Brochiactasis					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	absent	37	97.4	97.4	97.4
	present	1	2.6	2.6	100.0
	Total	38	100.0	100.0	

Table 5

Pleural Effusion					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	present	2	5.3	5.3	5.3
	absent	36	94.7	94.7	100.0
	Total	38	100.0	100.0	

Table 6

Lung Masses					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	present	2	5.3	5.3	5.3
	absent	36	94.7	94.7	100.0
	Total	38	100.0	100.0	

Table 7

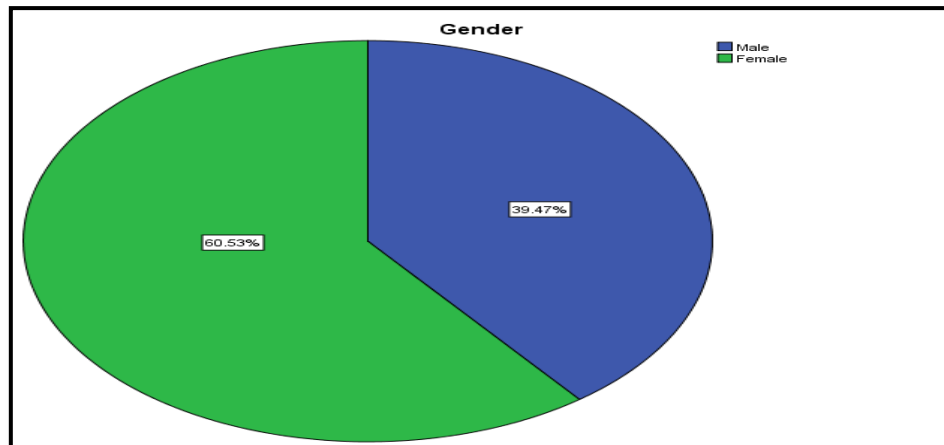
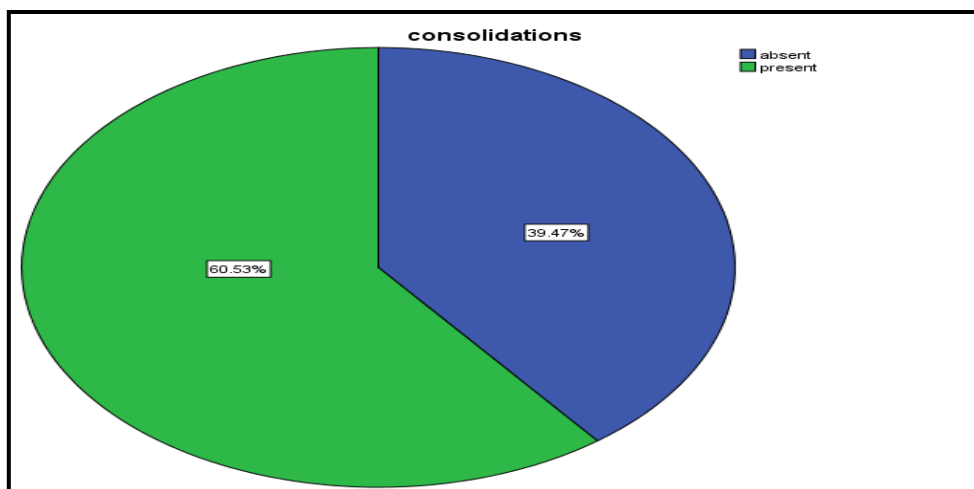
Abscess					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	present	1	2.6	2.6	2.6
	absent	37	97.4	97.4	100.0
	Total	38	100.0	100.0	

Table 8

consolidations					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	absent	15	39.5	39.5	39.5
	present	23	60.5	60.5	100.0
	Total	38	100.0	100.0	

Table 9

CT-severity scoring					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	mild	22	57.9	57.9	57.9
	severe	11	28.9	28.9	86.8
	normal	5	13.2	13.2	100.0
	Total	38	100.0	100.0	

**Figure 1****Figure 2**

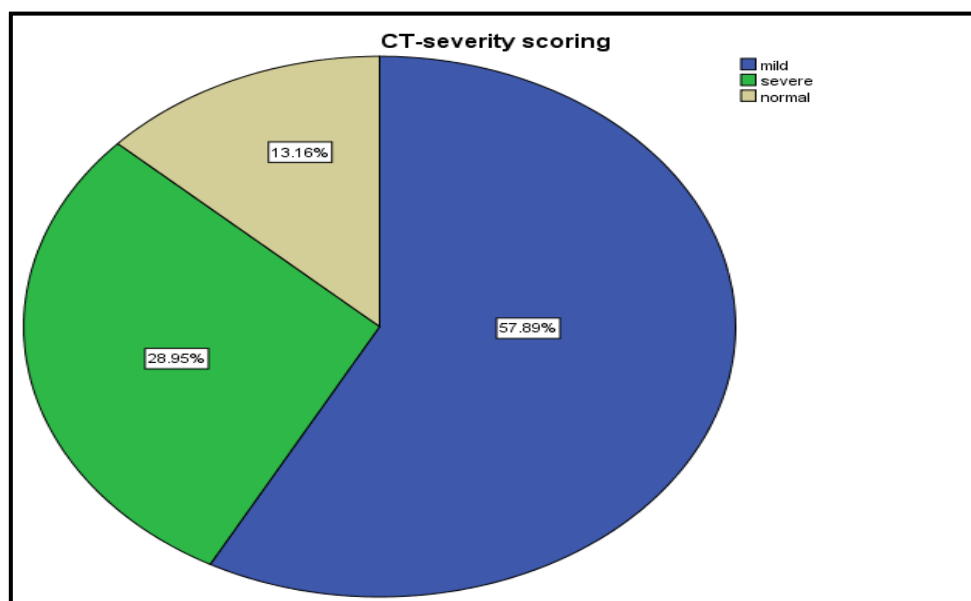


Figure 3

DISCUSSION:

SARS-CoV-2 is exceptionally irresistible, has a brooding period and the early indications of this disease are not common. Early conclusion is helpful for opportune quarantine and treatment, to forestall the nonstop transmission of the infection to sound individuals. The determination of COVID-19 pneumonia for the most part relies upon the extensive methodologies of the epidemiological information, clinical indications, clinical imaging, and research center information. The best quality level of determination is the positive aftereffect of nucleic analyses or high homology of the arrangement of viral quality sequencing information. As of now, the nucleic analyses stay the methodology for the determination with the most noteworthy particularity, in any case, the awareness is low, the sitting tight an ideal opportunity for the outcome is long. Chest CT assessment is quick, exceptionally delicate to lung sores, and liberated from obstruction of extra-pneumonic constructions. Consequently, it is the customary favored imaging strategy for COVID-19 pneumonia screening, analysis, and seriousness assessment of the illness course.

CONCLUSION

CT scan (computed tomography) is an excellent modality to identify Covid in a patient. It uses radiation to create image on the screen. It consists of a gantry and a control panel (computer). It has high diagnostic efficiency to identify covid-19. This helped to diagnose Covid-19 and provided confirmation about suspected cases in order to conduct further treatment of the patient.

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