

# Incidentalomas Discovered during COVID-19 Chest CT Screening: A Cross-sectional Study from Andhra Pradesh, India

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## ABSTRACT

**Introduction:** The highly contagious Coronavirus Disease 2019 (COVID-19) virus has spread across the globe. For the aberrant changes in the lung parenchyma, thin-section chest Computed Tomography (CT) is more sensitive than chest radiography and can identify early disease. Increased CT usage and resolution also lead to an increase in the discovery of “incidental” findings, creating questions about additional research, diagnosis, and follow-up with associated financial and emotional costs.

**Aim:** To evaluate the non COVID-19 lung pathologies and other system findings in High Resolution Computed Tomography (HRCT) chest done for COVID-19 screening study.

**Materials and Methods:** This was a cross-sectional study done in the Department of Radiodiagnosis at Dr. Pinnamaneni Siddhartha Institute of Medical Sciences and Research Foundation, Vijayawada, Andhra Pradesh, India, from May 2021 to December 2021. The CT scan was done in a craniocaudal direction with an average exposure time of 4-6 seconds, slice thickness of 5 mm and 1.5 mm in mediastinal and lung windows.

A total of 1000 HRCT scans done were examined for COVID screening. Data was entered in Microsoft Excel and analysed by using Statistical Package for Social Sciences (SPSS) software. Descriptive statistics were represented with percentages.

**Results:** A total of 348 cases were found with various other pathologies incidentally. Lesions like infectious and inflammatory lesions, metabolic diseases, tumours, metastases of various systems and fractures were found. Among 348 total cases with incidental findings 98 cases (28.1%) showed non COVID-19 lung pathologies, 114 cases (32.7%) had findings in the upper abdomen, 30 cases (8.6%) in the thyroid, and three cases (0.8%) had other findings.

**Conclusion:** The HRCT chest screening for COVID-19 not only provided the status of pulmonary infection but gave a broad view of many other system pathologies like in upper abdomen, musculoskeletal system, thyroid, breast which were found incidentally. Identifying those pathologies and correlating them with history will help in early detection and management.

**Keywords:** Coronavirus disease 2019, Computed tomography, Incidental findings, Infection, Lung, Tuberculosis

## INTRODUCTION

On 12<sup>th</sup> March 2020 Coronavirus Disease 2019 (COVID-19) was declared as a pandemic by WHO [1]. Illness diagnosis is a key component of patient management and disease control strategies. However, the lack of suitable laboratory space and nucleic acid testing kits has made COVID-19 testing difficult [2]. Furthermore, there may be many false negatives as a result of the lack of early abnormalities on chest radiographs [3].

Thin-section chest Computed Tomography (CT) is more sensitive than chest radiography in identifying the early changes of the disease in lung parenchyma [4,5]. For these reasons, during the COVID-19 outbreak, chest CT emerged as a leading diagnostic technique [3]. Increased CT usage and resolution also contributed to a rise in “incidental” findings that were unrelated to the primary diagnostic issue, raising concerns about further study, diagnosis and follow-up with their associated monetary and emotional costs [6]. The present study was an effort to see how many non COVID-19 pathologies were present while screening, which is an indirect information of prevalence of these diseases in general population. Normally CT screenings are not advisable hence not done on routine basis, but during special circumstances like this pandemic (COVID-19) screening was rampantly done.

Some authors have encouraged diagnosis based on clinical and chest CT findings alone due to lesser number of Reverse Transcriptase- Polymerase Chain Reaction (RT-PCR) kits in some centres, prolonged time for the results of the test and possible

false negative results [7]. In order to prevent adverse postoperative outcomes and to prevent spread of the infection to the hospital staff and other patients some in Netherlands have recommended CT to assess the possibility of COVID-19 infection in adults who are scheduled for surgery in whom an RT-PCR test is negative or missing [8]. A similar concern is also present prior to intensive immunosuppressive therapies in highly prevalent areas [9].

As early diagnosis helps in prompt treatment and is especially useful for the isolation of the patient. The CT has been done commonly for admission and as an preoperative investigation for emergency cases in the institution. However, many other infectious disease and some serious pathologies during the screening were found. Hence, these findings had been analysed systematically in the present study. Very few studies have looked at the incidental findings of lung and other systems on High Resolution Computed Tomography (HRCT) chest done rampantly during COVID-19 screening in Indian population [10,11]. So, the aim of the present study was to evaluate the non COVID-19 lung pathologies and other system findings in HRCT chest done for COVID screening study.

## MATERIALS AND METHODS

This was a cross-sectional study done in the Department of Radiodiagnosis at Dr. Pinnamaneni Siddhartha Institute of Medical Sciences and Research Foundation, Vijayawada, Andhra Pradesh, India, from May 2021 to December 2021. Ethical clearance was obtained from the Institute (PG/729/22). Informed consent was obtained from the patients at the time of scan.

**Inclusion criteria:** Cases with incidental findings like cavitory lung lesions, active tuberculosis, tumours of lung or any other visualised areas in the HRCT chest, metastasis, significant pancreatic pathologies including pancreatitis, breast lesions, bony pathologies were included in the study.

**Exclusion criteria:** All COVID-19 Reporting and Data System (CO-RADS) 4 and 5 cases [12] for lung pathologies, cases with simple fibrotic strands and atelectatic bands, non significant lymphadenopathy, fatty liver, calcified granulomas and early degenerative changes in the bones were excluded from the study.

### Study Procedure

Among the study period all the cases were screened for COVID-19 and first 1000 cases had been taken by convenient sampling. 348 cases having incidental findings were included in the study. The CT scan was done using a 16-slice SIEMENS (SOMATOM EMOTION 16). CT was performed with the patient in supine position during end-inspiration in a craniocaudal direction with an average exposure time of 4-6 seconds and slice thickness of 5 mm in mediastinal and lung windows. Technologists who performed CT of patients with suspected COVID-19 were required to wear PPE kits. Every chest CT examination was read first by one radiologist and was then checked by another radiologist who had experience in interpreting chest CT. Though there was a minor interobserver variability in the description of these pathologies, there was no significant difference in its description and characterisation of the lesions of pathologies between the two readers.

### STATISTICAL ANALYSIS

Data was entered in Microsoft excel and analysed by using Statistical Package for Social Sciences (SPSS) software. Descriptive statistics were represented with percentages. Microsoft excel had been used to generate tables.

### RESULTS

A total of 348 cases were found with various other pathologies incidentally. Among them females were 122 (35%) and males were 226 (64.9%) in number. Mean age of distribution was 45-55 years. Lesions like infectious and inflammatory, metabolic diseases, tumours, metastases of various systems and fractures were found. Among 348 total cases with incidental findings, 98 cases (28.1%) showed non COVID-19 lung pathologies, 114 cases (32.7%) had findings in the upper abdomen, 94 cases (27.0%) had findings in the musculoskeletal system, three cases (0.8%) had other findings like axillary abscess and eventeration of diaphragm [Table/Fig-1].

Non COVID-19 lung pathologies	Upper abdomen	Musculoskeletal system	Thyroid	Breast	Others
98 (28.1%)	114 (32.7%)	94 (27.0%)	30 (8.6%)	9 (2.5%)	3 (0.8%)

**[Table/Fig-1]:** Table showing number and percentage of incidental lesions in different systems (N=348).

\*\*Others like axillary abscess and eventeration of diaphragm

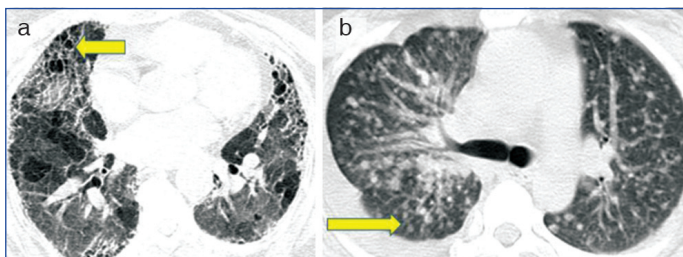
According to [Table/Fig-2], 98 cases with non COVID-19 lung pathologies included sequelae of old infections like fibrosis (11.4%), active tuberculosis (5.1%), cavitory lesions like an abscess, aspergilloma, emphysema, pneumothorax (4.5%), interstitial lung diseases like Unusual Interstitial Pneumonia (UIP), Non Specific Interstitial Pneumonia (NSIP) and Systemic Lupus Erythematosus (SLE) [Table/Fig-3a]. Another case showed multiple centrilobular and peribronchovascular small nodules which were found to be a case of miliary tuberculosis [Table/Fig-3b,c].

Another case showed a hyperdense lesion anteroposterior to the left bronchus along with a conglomerate group of mediastinal lymph nodes all the features are suggestive of a perihilar malignant lesion, upon biopsy it was found to be a squamous cell carcinoma

Pathology	N	Percentage
Sequelae of old infections*	40	11.4
Active tuberculosis	18	5.1
Cavitory lesions	16	4.5
Interstitial lung diseases	14	4
Tumours	6	1.7
Metastases	4	1.1

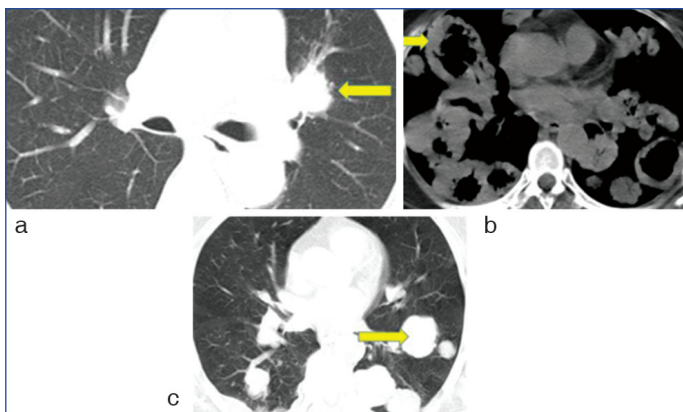
**[Table/Fig-2]:** Table showing number and percentage of incidental lesions in the respiratory system (n=98).

\*Old infections- Most of them are a sequelae of tuberculosis as per the pattern. However, it is difficult to speculate the causative organism



**[Table/Fig-3]:** Axial HRCT chest showing; a) Subpleural honey comb cysts with reticular opacities, traction bronchiectasis, ground glass opacities associated with mosaic attenuation seen in bilateral lung fields- Interstitial lung disease NSIP (yellow arrow). b) Both centrilobular and peribronchovascular small nodules are seen diffusely scattered in both the lungs- Features are in favour of miliary tuberculosis.

of the lung [Table/Fig-4a]. Tumours like bronchogenic carcinoma, small cell carcinoma and squamous cell carcinoma were seen. Metastasis from urinary bladder cancer, prostate cancer and gastric cancers were found. One of the cases showed multiple cavitory lesions [Table/Fig-4b] in both the lungs, upon further follow-up it was found that this was a case of gastric carcinoma, now showing metastasis to the lungs which was found on COVID-19 screening. One of the cases showed multiple cannonball like lesions [Table/Fig-4c] in both the lung fields. On follow-up it was found that patient was a known case of urinary bladder cancer with metastasis to the lungs in the present scan.

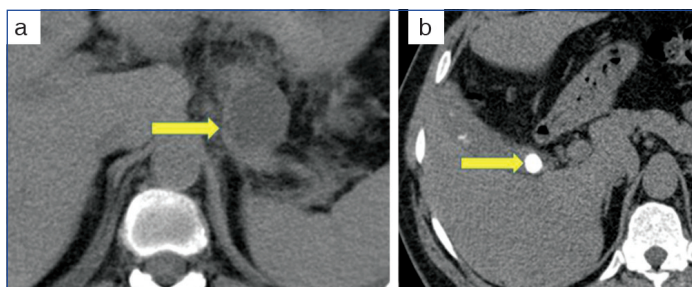


**[Table/Fig-4]:** Axial HRCT chest showing; a) A 63-year-old male with hyper dense lesion anterosuperior to left bronchus along with conglomerate group of mediastinal lymph nodes- features are suggestive of peri hilar malignant lesion. Histopathology of the biopsy showed squamous cell carcinoma of lung. b) A 54-year-old female known case of gastric carcinoma showing multiple lobulated lung lesions with central cavitory metastases; c) A 71-year-old male with multiple well defined nodules found throughout the parenchyma- cannonball metastases from urinary bladder cancer (yellow arrow).

Among 114 incidental findings in the upper abdomen 75 cases (21.5%) had hepatobiliary findings. Many hepato biliary lesions like hypodense lesions seen in 11 (3%) cases were found to be abscess or cysts on further sonological examination. Cholelithiasis and acute cholecystitis changes were also seen in around 64 cases (18%). Fourteen cases (4%) had findings in the pancreas which included acute and chronic pancreatitis, and pseudocysts. One of the cases showed diffusely enlarged pancreas with peripancreatic fat stranding and cyst formation at the tail of pancreas which represents pancreatitis with pseudocyst formation [Table/Fig-5a]. Another case



showed atrophy of the pancreas with multiple calculi representing cholelithiasis [Table/Fig-5b].



**[Table/Fig-5]:** Axial HRCT showing; a) Cystic lesion adjacent to pancreas with peripancreatic fluid and inflammatory fat stranding- represents pancreatitis. b) Multiple calculi noted in the neck region of gall bladder- cholelithiasis (yellow arrow).

Twenty five cases (7.1%) had findings in the adrenorenal system like enlarged adrenal glands and calcifications. Renal calculi, hydronephrosis, and perinephric fat stranding were found. These are shown in [Table/Fig-6]. Among 94 (27.0%) incidental lesion of musculoskeletal system, osteopenia, degenerative changes, fractures, metabolic bone disorders, soft tissue lesions and metastases were found [Table/Fig-7].

Lesions	n	Percentage
Hepatobiliary	75	21.5%
Pancreas	14	4%
Adreno renal	25	7.1%

**[Table/Fig-6]:** Incidental lesions in the upper abdomen (N=348).

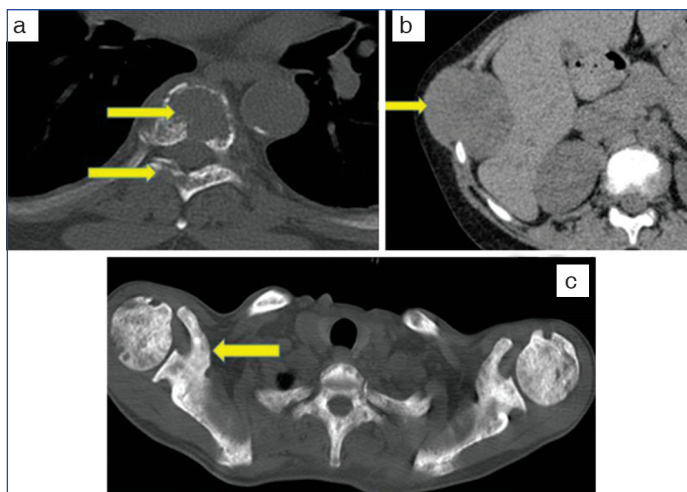
Lesions	n	Percentage
Osteopenia and degenerative changes	54	15
Fractures	16	4.5
Vertebral haemangioma	8	2.2
Metabolic bone diseases	6	1.7
Soft tissue lesions	6	1.7
Metastases	4	1.1
Total	94	27%

**[Table/Fig-7]:** Incidental lesions in the musculoskeletal system (N=348).

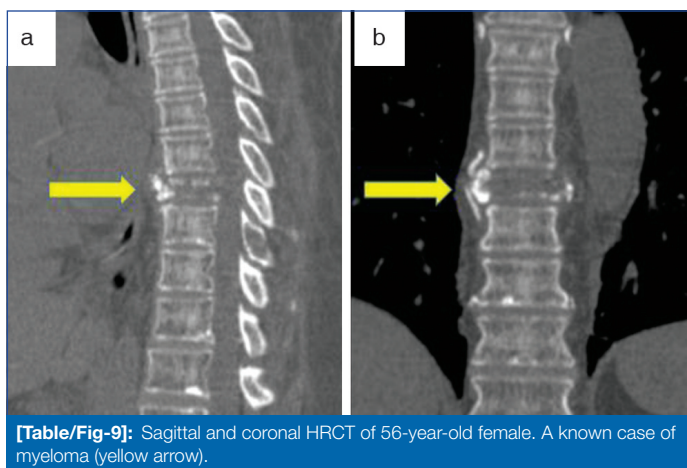
one of the cases showed multiple osteolytic lesions in ribs and spine which is involving both anterior and posterior elements, which represents metastasis [Table/Fig-8a]. One of the cases showed a large soft tissue mass lesion noted involving the right chest wall with abdominal and subcutaneous extension. Further follow-up was done with CECT chest and histopathology of biopsy showed primitive neuroectodermal tumour [Table/Fig-8b]. Another case showed diffuse increased density of the visualised bones with a history of chronic kidney disease representing renal osteodystrophy [Table/Fig-8c].

One of the cases showed wedge compression of D8 vertebrae with a hypodense lesion in the body. This was found to be a known case of myeloma [Table/Fig-9]. Another case showed extensive flowing ossifications which represent Diffuse Idiopathic Skeletal Hyperostosis (DISH). Bones appear osteopenic and show degenerative changes. Another case showed large intramuscular lipoma in the trapezius muscle. Few cases showed polka dot and jailed bar appearance in vertebral bodies indicating multiple haemangiomas. Few cases showed decreased joint space and osteophytes in the shoulder joint indicating osteoarthritis.

Among 30 (8.6%) incidental lesions of thyroid, hypodense lesions in 10 patients (2.8%), diffuse thyroid enlargement with nodules in eight cases (2.2%), heterogenous density of the gland in five cases (1.4%), calcifications in four cases (1.1%) and retrosternal extension of the thyroid in three cases (0.8%) were seen. One of the cases showed a heterogeneously enlarged thyroid gland with multiple nodules and

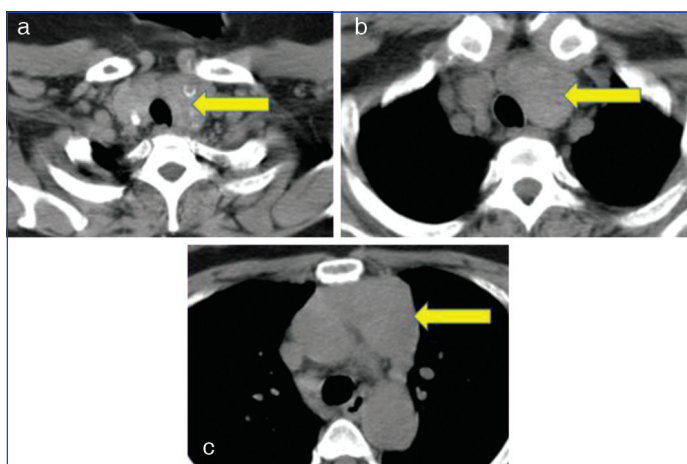


**[Table/Fig-8]:** Axial HRCT showing; a) Multiple osteolytic lesions in visualised spine with involvement of pedicle and ribs- this likely represents metastases (yellow arrow); b) A 11-year-old male showed large soft tissue mass lesion involving right chest wall with abdominal and subcutaneous extension. Histopathology showed primitive neuroectodermal tumour (yellow arrow); c) A 50-year-old male showed diffuse increased density of the visualised bones with history of chronic kidney disease-possible renal osteodystrophy (yellow arrow).



**[Table/Fig-9]:** Sagittal and coronal HRCT of 56-year-old female. A known case of myeloma (yellow arrow).

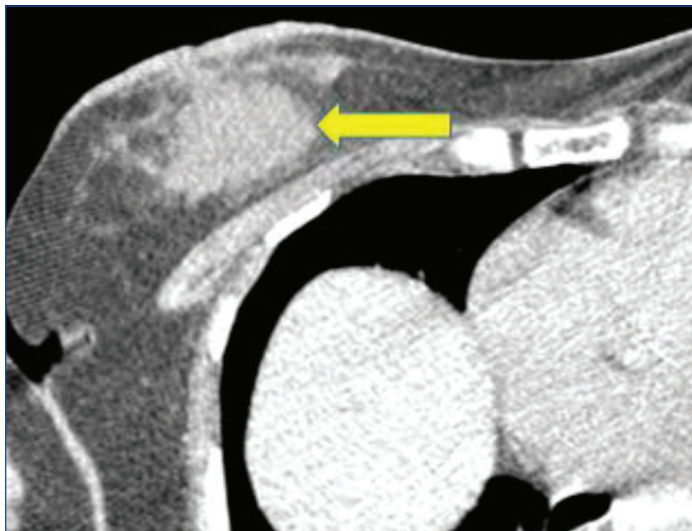
calcifications. It was also showing retrosternal extension. Excision biopsy showed adenomatous goitre [Table/Fig-10]. Another case showed a large homogenous mass in the anterior mediastinum which is seen extending from the superior mediastinum, this was also compressing the heart, upon further follow-up this was found to be a case of thymoma.



**[Table/Fig-10a-c]:** Axial HRCT of 47-year-old female showing enlarged heterogenous thyroid with multiple nodules and calcifications with retrosternal extension on histopathology proved as adenomatous goitre (yellow arrow).

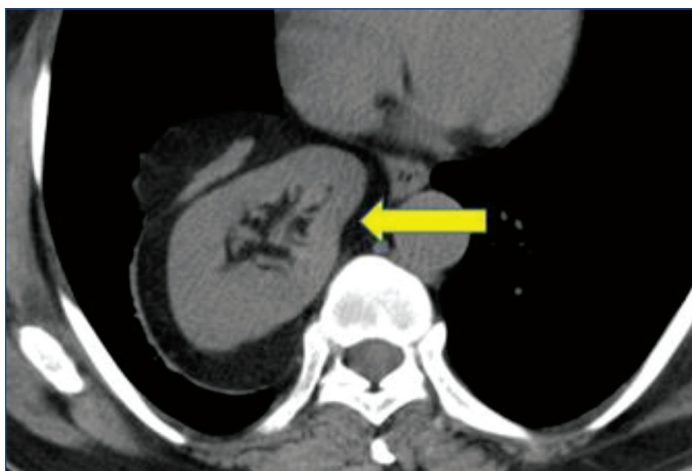
Among 9 (2.5%) incidental findings in breast, hypodense lesions, soft tissue density lesions and calcifications were seen. One of the cases showed a well-defined hyperdense lesion in the right breast with thickening of the overlying skin. Further evaluation was done

on mammography and Ultrasound (USG) showed a neoplastic lesion. Upon excision biopsy, it was found to be an infiltrative duct cell carcinoma of the breast [Table/Fig-11]. Another case showed well-defined isodense lesions seen in the right breast. On further follow-up this was found to be multiple fibroadenomas. Another case showed well defined isodense lesion in the left breast with evidence of eccentric punctate calcification.



**[Table/Fig-11]:** Axial HRCT of a female showing a well defined hyperdense lesion in right breast with thickening of overlying skin. Histopathologically it is proven to be infiltrative duct cell carcinoma of breast.

Among 3 (0.8%) other lesions two cases of axillary abscess, one case of diaphragmatic eventration were found. One of the cases showed elevation of the right dome of diaphragm with evidence of right kidney in the right hemithorax [Table/Fig-12].



**[Table/Fig-12]:** Axial HRCT of a 65-year-old male showing high renal ectopia due to eventration of right dome of diaphragm.

## DISCUSSION

The gold standard in the diagnosis of COVID-19 is the detection of SARS-CoV-2 ribonucleic acid in secretions of the patients by Reverse Transcriptase-Polymerase Chain Reaction (RT-PCR) [13,14]. However, it is of low sensitivity and high specificity in the diagnosis of COVID-19 [15]. Due to false negativity shown by this in the early period of disease, prolonged period of time required for the results of the test and non availability of the test in some centres usage of radiological investigation methods are started intensively [16,17]. As a result number of CT scans done for the patients with symptoms suspicious of COVID-19 had rapidly increased.

A computed tomography incidentaloma is a discovery or abnormality that was unintentionally discovered. These could be typical findings, variations of normal findings, or pathological findings. A calcified lung granuloma, for example, may be abnormal but have little to no clinical importance, necessitating further investigation. Alternatively,

they may be highly serious and necessitate treatment right once (like a large, central pulmonary embolus). The clinical significance of incidentalomas, such as a thyroid nodule, is debatable, demanding further investigation through clinical correlation, follow-up, and/or additional testing [18].

The prevalence of incidental findings has been studied in CT chest at different centres. In the present study out of 348 cases, 98 cases were with non COVID-19 lung pathologies.

In another study investigating the frequency of incidental findings in CT scans for lung cancer screening, the primary lung was diagnosed in 0.62% of patients with lung lesions [19]. In the chest CT scans performed with 633 workers exposed to asbestos, five patients (0.79%) had primary lung cancer [20]. In present study, primary lung cancer were found in six patients (1.7%) and metastases in four patients (1.1%) which is showing increased incidence of both compared to previous studies.

One case showed a perihilar malignant lesion, upon biopsy it is found to be a squamous cell carcinoma of the lung. One of the cases showed multiple cannonball metastasis from urinary bladder cancer and another showed multiple cavitary lesions which are gastric carcinoma metastasis. In NELSON study, the majority (73%) of a lung cancer screening trial employing low-dose multi-detector computed tomography in high-risk patients for lung cancer had no clinically significant incidental findings. Only 7% of patients exhibit clinically significant incidental findings. Incidental findings with clinical implications are present in just 1% of participants, and all are benign illnesses except one which was a pancreatic cancer metastasis, the participant received no clinical benefit from the one malignant lesion that was discovered which was incurable due to the presence of metastatic disease. Based on these data, the authors cautioned against routinely looking for and disclosing incidental discoveries from lung cancer screening tests as this approach may increase expenses, cause patient concern, and increase the chance of iatrogenic harm [21].

Incidental findings in the thyroid were found in 30 (8.6%) cases, among which diffuse thyroid enlargement with nodules seen in eight cases (2.2%), one of these cases showed adenomatous goitre with heterogeneously enlarged thyroid gland with multiple nodules and calcifications. In a study done by Frank L and Quint LE, about 16% of chest CT scans reveal thyroid nodules, which are more frequently observed in female patients [18]. The majority of thyroid lesions discovered by chance are benign, with a 9-11% frequency of malignant tumours [22,23]. In a study done by Dündar I et al., there were 34 (2.21%) incidental findings in the thyroid tissue, of which 31 were solitary nodules and three multinodular goitres [10].

The distinction between benign and malignant thyroid lesions cannot be reliably made using CT characteristics. Furthermore, CT cannot distinguish between solid nodules, solid cysts, and simple cysts [23]. When a thyroid abnormality is unintentionally identified by CT, sonography is a good follow-up test since CT under-estimates the number of nodules compared to sonography [23,24].

The most cost-effective course of action for additional assessment after the discovery of an accidental thyroid nodule may be referral to a thyroid expert, though ultrasonography may also be advised. According to the guidelines of the American Thyroid Association, only nodules larger than 1 cm need additional testing because they are more likely clinically relevant malignancies than smaller lesions because doing so would be cost-effective compared to working up all small nodules [25].

In a study by Dündar I et al., incidental findings detected in a total of 61 patients (3.96%) in the abdomen entering the cross-sectional area, with cholelithiasis (n=16, 1.04%), nephrolithiasis (n=23, 1.49%), adrenal adenoma (n=2, 0.13%). In the present study, 114 (32.7%) patients showed incidental findings in abdomen. Many hepatobiliary lesions like hypodense lesions seen in 11 (3%), cholelithiasis and



acute cholecystitis changes around 64 cases (18%), 14 cases (4.0%) had findings in the pancreas and 25 cases (7.1%) had findings in adrenorenal system.

Among 94 (27%) musculoskeletal system findings osteopenia, degenerative changes, fractures, metabolic bone disorders, soft tissue lesions like primitive neuroectodermal tumour, neoplastic lesions like myeloma and metastases were included. Others like Diffuse Idiopathic Skeletal Hyperostosis (DISH), intramuscular lipoma, multiple haemangiomas and osteoarthritis were found. In a study done by Dundar I et al., there were 27 (1.75%) findings, including 21 degenerative changes in bone structures, five vertebral hemangiomas and one metastasis (non small cell lung carcinoma) [10].

Nine patients (2.5%) showed hypodense lesions, soft tissue density lesions and calcifications in breast. One infiltrative duct cell carcinoma of the breast. One case with multiple fibroadenomas and one patient with a well defined isodense lesion in the left breast with evidence of eccentric punctate calcification seen. In a study done by Dundar I et al., one cystic and five solid lesions in the breast in six female patients (0.38%) were detected. While three of the solid breast lesions were diagnosed as histopathological fibroadenoma, two were benign lesions that did not show any difference in clinicoradiological follow-ups but had no histopathological diagnosis [10].

Another study done by Moyle P et al., on the significance of the incidental breast lesions on CT shows that in a large group of individuals, incidental breast lesions shown to account for 30% of breast cancers that were previously unrecognised, particularly masses with atypically spiculated borders [26]. Inoue M et al., described that with a positive predictive value of 100% for spiculated margins and a positive predictive value of 99% for irregular shape, dynamic dedicated breast CT examines diagnostic characteristics of cancer [27]. Nearly all calcifications seen on CT are benign because of the limited spatial resolution. Oval lesions have a higher chance of being benign and others like round, lobulated and indistinct lesions are more ambiguous because these characteristics are frequently seen in both benign and malignant breast diseases. It is uncommon to find tiny (0.5 mm) calcifications, which have a higher likelihood of being malignant [28]. It is beneficial to refer breast lesions diagnosed on CT for a formal triple evaluation. CT exams should always include a thorough inspection of the breast [26]. [Table/Fig-13] is showing the comparison of present study with similar studies [10,11,18,21,26].

Author's name and year	Place of study	Sample size	Parameters compared	Conclusion
Dundar I et al., 2021 [10]	Turkey	1540	Parenchymal and extra parenchymal findings	It is important to define IFs other than pneumonia in patients who underwent chest CT scans during the pandemic. The CT scans of the patients with a suspicion of COVID-19 must be detailed examined.
Ramanan RV et al., 2021 [11]	Chennai	Multicentric study	Incidental chest computed tomography findings in asymptomatic COVID-19 patients	The COVID-19 pandemic will take some time to run its course and even after if it begins ebbing away, sporadic cases may show up as asymptomatic incidental findings on CT done for other indications. These represent occult community infection and need to be addressed swiftly.

Moyle P et al., 2010 [26]	Cambridge	78	Incidental breast lesions were therefore analysed	The breast is an important review area on CT, and a dramatic rise in the use of CT imaging has led to the increased detection of incidental breast lesions.
Van de Wiel JC et al., 2007 [21]	Netherlands	1929	To determine the frequency and spectrum of IFs and their clinical implications in participants at high risk for lung cancer undergoing low-dose MDCT for lung cancer screening.	Only few participants at high risk for lung cancer have IFs with clinical implications, and that no lives have been saved yet by paying attention to IFs.
Frank L and Quint LE 2012 [18]	Michigan		Chest CT incidentalomas: thyroid lesions, enlarged mediastinal lymph nodes, and lung nodules	Incidental findings are frequently found on chest CT examinations. Although most of these findings are not clinically significant, some may represent incidentally discovered malignancies.
Present study, 2022	India	1000	To evaluate the non COVID-19 lung pathologies and other system findings in HRCT chest done for COVID screening study.	Finding incidentalomas could result in a lot of costly follow-up exams, increased radiation exposure for healthy patients, needless invasive procedures, and patient concern. The radiologist should provide evidence-based recommendations for additional workup or follow-up when reporting an accidental finding, as well as the likelihood of the finding's significance.

[Table/Fig-13]: Comparison of present study with similar studies [10,11,18,21,26].

### Limitation(s)

Follow-up could not be done for all the cases due to pandemic. Immediate work-up of the pathologies could not be done because of protocols of quarantine. However, some of the pathologies have been worked up in the follow-up period which were in cordance of radiological diagnosis.

### CONCLUSION(S)

In present study, incidental lesions in different systems were detected. Of which maximum incidental lesion were detected in upper abdomen (32.7%) followed by non COVID-19 lung pathologies (28.1%). Finding incidentalomas could result in a lot of costly follow-up exams, increased radiation exposure for healthy patients, needless invasive procedures and patient concern. The radiologist should provide evidence-based recommendations for additional workup or follow-up when reporting an accidental finding, as well as the likelihood of the finding's significance which will help in early detection and management.

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