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Example Reports of Typical, Indeterminate, Atypical, and Negative Category CTs, with some selected correlative image examples

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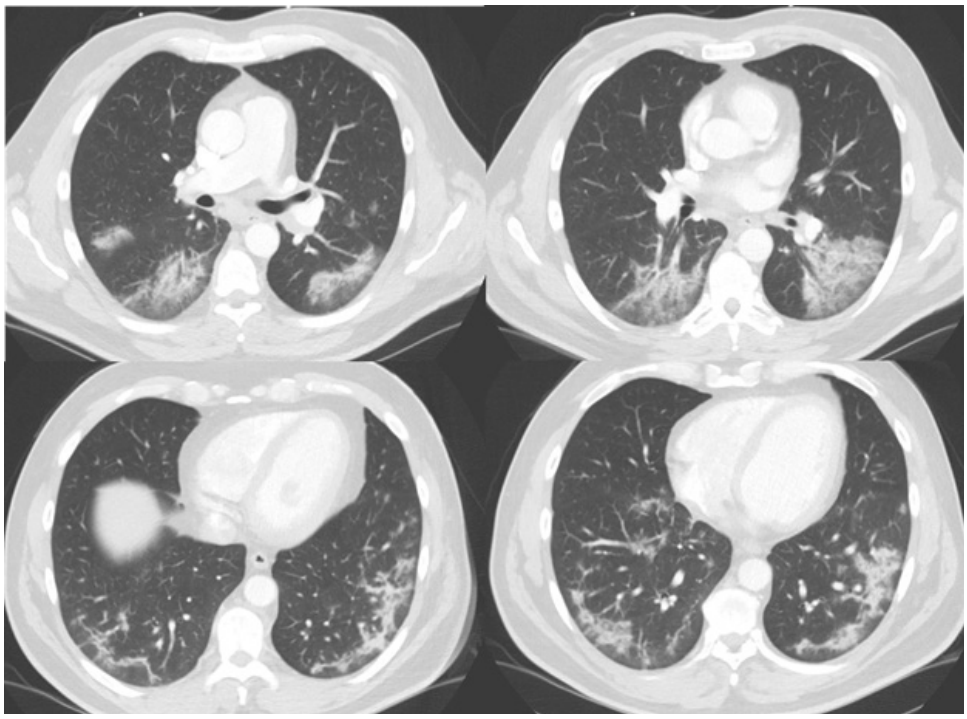
- Additional statements in italics can be added or inserted as macros when the imaging finding is present.
- Routine CT screening for diagnosing or excluding COVID-19 is currently not supported by societies. However, these reporting templates are provided to guide radiologists in reporting of findings that may potentially relate to COVID-19, if performed in patients who may or may not be under investigation (PUI-COVID-19) for the infection of COVID-19.
- Parentheses in report indicate optional phrases/terms:
  *The decision of use of the term "COVID-19" in reports depends on a number of factors including suspicion for the infection, prevalence of COVID-19, and institutional preferences. Conferring with clinical colleagues prior to implementation to establish an approach to reporting and frequent reassessment of the approach in the community will aid in diagnosis and management of patients with COVID-19.
  *The decision of including statement in impression of a negative study that "CT may be negative in the early stages of COVID-19" is optional and determined after conferring with clinicians.
- Communication methods of findings will vary according to institution.



Typical

Typical appearance:
Multifocal rounded ground-glass opacities in a peripheral distribution with scattered areas of intralobular lines. A reverse halo sign or other findings of organizing pneumonia seen in later stages of the disease are other findings suggesting typical appearance.

Examination:
CT CHEST WO CONTRAST

Indication:
PUI for COVID-19, cough, and fevers.

Technique:
CT chest without contrast was obtained.

Comparison:
None.

Findings:
Chest:— Multifocal *rounded [if finding present]* ground-glass opacities *with consolidation [if finding present]* in a peripheral distribution *with scattered areas of intralobular lines ("crazy paving") [if finding present]* are noted. *Reverse halo sign [add if finding present] is present in nodules.*

No pleural effusion or pneumothorax.

Visualized thyroid is unremarkable. No supraclavicular, axillary, or mediastinal lymphadenopathy. Evaluation of hilar lymph nodes is limited without contrast.

Normal heart size. No pericardial effusion. The thoracic aorta and main pulmonary artery are normal caliber.

Upper abdomen:— Unremarkable.

Musculoskeletal:— No suspicious osseous lytic or blastic lesions. Mild degenerative changes of the thoracic spine.

Impression:
Multifocal, peripherally distributed, rounded ground-glass opacities with additional scattered areas of crazy paving and organizing pneumonia, typical for COVID-19 pneumonia.

Commonly reported imaging features of (COVID-19) pneumonia are present. Other processes such as influenza pneumonia and organizing pneumonia, as can be seen with drug toxicity and connective tissue disease, can cause a similar imaging pattern.

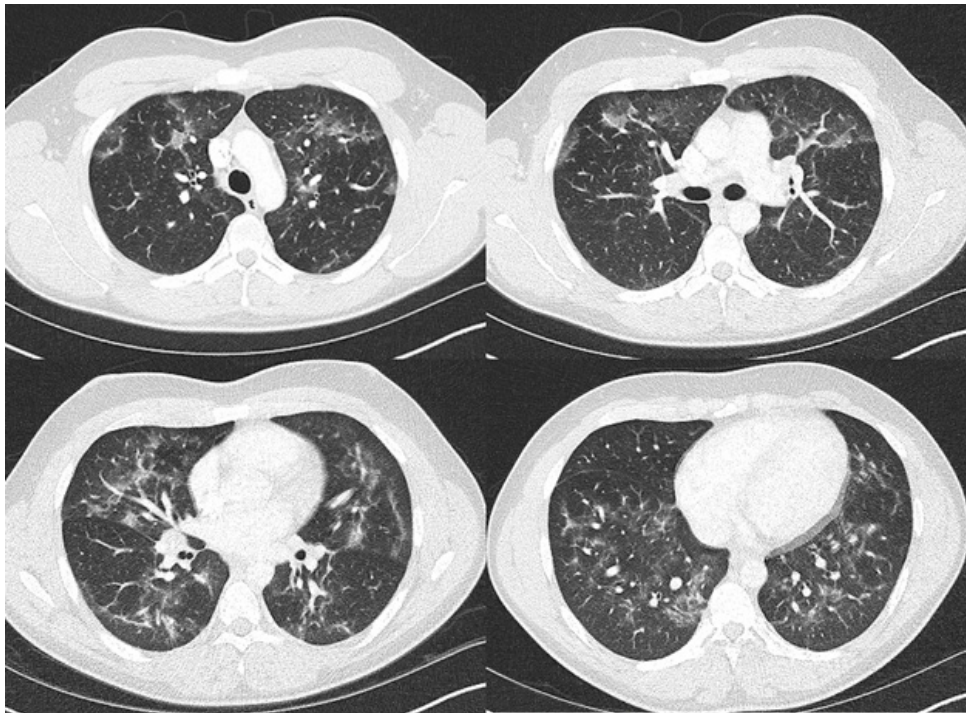
Flag:
(Cov19Typ)

Reference
Simpson S, et al. Radiological Society of North America Expert Consensus Statement on Reporting Chest CT Findings Related to COVID-19. Endorsed by the Society of Thoracic Radiology, the American College of Radiology, and RSNA. Radiology: Cardiothoracic Imaging, 2020. *https://doi.org/10.1148/ryct.2020200152*

This report contains findings that may be critical to patient care.

Finding observed date/time:
[TIME] on [DATE].
Findings were discussed with Dr. [ ] at [TIME] on [DATE].

FLAG:
(C)



Indeterminate

Indeterminate appearance:
Bilateral ground-glass opacities that are indeterminate. Typical features of COVID-19 also must be absent. Cases with a few small GGO with a nonrounded and nonperipheral distribution are in this category.

Examination:
CT CHEST WO CONTRAST

Indication:
PUI for COVID-19, cough, and fevers.

Technique:
CT chest without contrast was obtained.

Comparison:
None.

Findings:
Chest:— Multifocal nonrounded ground-glass opacities *with consolidation [add if present]* present, however lacking peripheral distribution, *and with a diffuse, perihilar, or unilateral distribution [add which features present].*

No pleural effusion or pneumothorax.

Visualized thyroid is unremarkable. No supraclavicular, axillary, or mediastinal lymphadenopathy. Evaluation of hilar lymph nodes is limited without contrast.

Normal heart size. No pericardial effusion. The thoracic aorta and main pulmonary artery are normal caliber.

Upper abdomen:— Unremarkable.

Musculoskeletal:— No suspicious osseous lytic or blastic lesions. Mild degenerative changes of the thoracic spine.

Impression:
Multifocal, randomly distributed, nonrounded ground-glass opacities; nonspecific and likely infectious or inflammatory.

Imaging features are nonspecific and can occur with a variety of infectious and noninfectious processes, including COVID-19 infection.

Reference:
Simpson S, et al. Radiological Society of North America Expert Consensus Statement on Reporting Chest CT Findings Related to COVID-19. Endorsed by the Society of Thoracic Radiology, the American College of Radiology, and RSNA. Radiology: Cardiothoracic Imaging, 2020. *https://doi.org/10.1148/ryct.2020200152*

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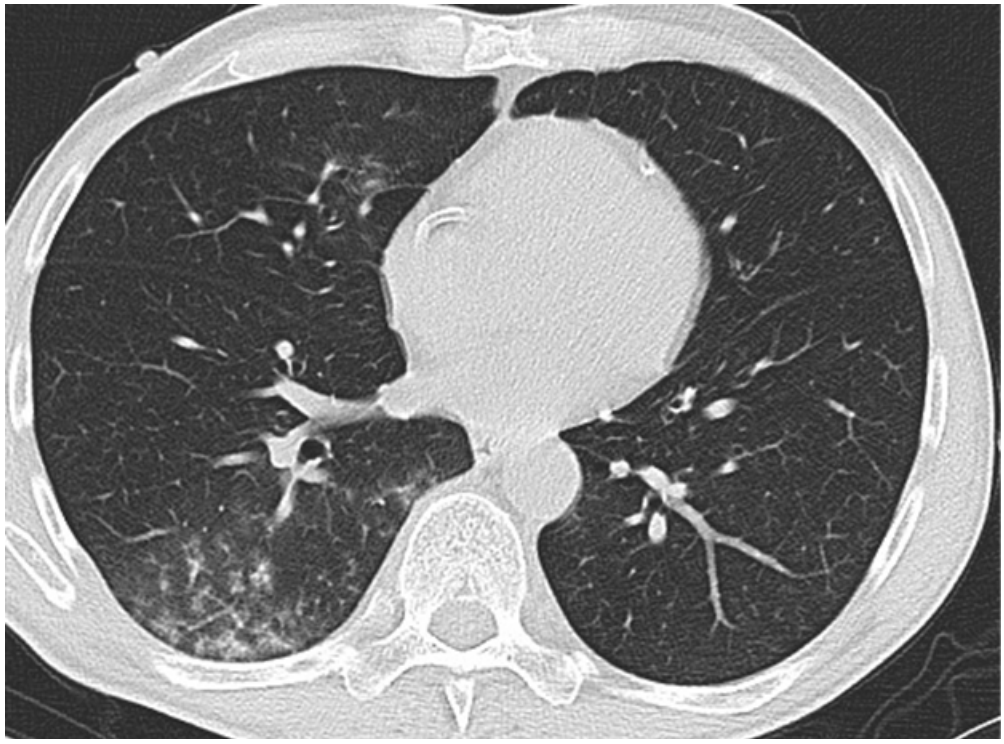
FLAG:
(C)



Atypical

Atypical appearance:
Multifocal tree-in-bud opacities. Typical features of COVID-19 also must be absent in addition to either isolated lobar or segmental consolidation, discrete small nodules (tree-in-bud), lung cavitation, or smooth interlobular septal thickening with pleural effusion (edema).

Examination:
CT CHEST WO CONTRAST

Indication:
PUI for COVID-19, cough, and fevers.

Technique:
CT chest without contrast was obtained.

Comparison:
None.

Findings:
Chest:— No peripheral bilateral ground-glass opacities are identified. Lung parenchymal findings atypical or uncommonly reported *[indicate findings such as isolated lobar or segmental consolidation, tree-in-bud nodules, lung cavitation, or smooth interlobular septal thickening with pleural effusion]*.

No pleural effusion or pneumothorax.

Visualized thyroid is unremarkable. No supraclavicular, axillary, or mediastinal lymphadenopathy. Evaluation of hilar lymph nodes is limited without contrast.

Normal heart size. No pericardial effusion. The thoracic aorta and main pulmonary artery are normal caliber.

Upper abdomen:— Unremarkable.

Musculoskeletal:— No suspicious osseous lytic or blastic lesions. Mild degenerative changes of the thoracic spine.

Impression:
Imaging features are atypical or uncommonly reported for (COVID-19) pneumonia. Alternative diagnoses should be considered.

Reference:
Simpson S, et al. Radiological Society of North America Expert Consensus Statement on Reporting Chest CT Findings Related to COVID-19. Endorsed by the Society of Thoracic Radiology, the American College of Radiology, and RSNA. Radiology: Cardiothoracic Imaging, 2020. *https://doi.org/10.1148/ryct.2020200152*

This report contains findings that may be critical to patient care.

Finding observed date/time:
[TIME] on [DATE].
Findings were discussed with Dr. [ ] at [TIME] on [DATE].

FLAG:
(C)

Negative

Examination:
CT CHEST WO CONTRAST

Indication:
PUI for COVID-19, cough, and fevers.

Technique:
CT chest without contrast was obtained.

Comparison:
None.

Findings:
Chest:— No focal consolidation, pleural effusion, or pneumothorax. No suspicious pulmonary nodules.

Visualized thyroid is unremarkable. No supraclavicular, axillary, or mediastinal lymphadenopathy. Evaluation of hilar lymph nodes is limited without contrast.

Normal heart size. No pericardial effusion. The thoracic aorta and main pulmonary artery are normal caliber. Coronary artery calcifications.

Upper abdomen:— Unremarkable.

Musculoskeletal:— No suspicious osseous lytic or blastic lesions. Mild degenerative changes of the thoracic spine.

Impression:
No CT evidence of acute abnormality in the chest.
No CT findings present to indicate pneumonia. (Note: CT may be negative in the early stages of COVID-19.)
Flag: (Cov19Neg)

Reference:
Simpson S, et al. Radiological Society of North America Expert Consensus Statement on Reporting Chest CT Findings Related to COVID-19. Endorsed by the Society of Thoracic Radiology, the American College of Radiology, and RSNA. Radiology: Cardiothoracic Imaging, 2020. *https://doi.org/10.1148/ryct.2020200152*

Findings were discussed with Dr. [ ] at [TIME] on [DATE].

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