

SUBJECT:	Incidental Detection of Lung Findings That Could Represent COVID-19 in Patients Without Respiratory Symptoms
DATE:	July 23, 2020
APPROVED:	Initial Approval: 4/3/2020 Last Update: 6/29/20 – added background information on return to work and contact tracing in case of exposure; added actions of contacting occupational health and radiology staff leadership for imaging studies meeting criteria

Background

Despite routine screening of patients for COVID-19 symptoms and risk factors at hospital entrances, some unsuspected patients will have imaging findings incidentally discovered that are more suspicious for COVID-19 infection. The purpose of this statement is to provide guidelines for what to do when findings are incidentally encountered that could be attributed to COVID-19 pneumonia.

The *Radiological Society of North America* (RSNA) recently released an expert consensus statement that summarizes findings and provides suggested wording for reports in cases of suspected COVID-19 pneumonia (1). According to this statement, findings that would fall under the “typical appearance” category of this consensus should be considered urgent and communicated to the referring clinician according to nonroutine communication guidelines. The specific radiological findings include (please refer to official document for more information, [available free here](#)):

- Peripheral, bilateral (multilobar), ground glass opacity (GGO) with or without consolidation or visible intralobular lines (“crazy-paving”)
- Multifocal GGO of rounded morphology with or without consolidation or visible intralobular lines (“crazy-paving”)
- Reverse halo sign or other findings of organizing pneumonia (often seen later in the disease)

There are certain particular imaging patterns of lung disease (see example, **Figure 1**) that are suggestive of COVID-19 pneumonia in the appropriate clinical context (such as acute viral-type illness in an immunocompetent patient). However, we do not currently know the true sensitivity or specificity of these imaging findings in asymptomatic patients as available data is from retrospective studies subject to selection bias (2–5). In addition, these imaging findings can overlap with lung injury from multiple causes including other viral pneumonias and non-infectious pneumonitis such as drug reactions.

What to do When Incidental Imaging Findings are “Typical” for COVID-19

Current institutional surgical mask policies for patients and healthcare workers are expected to minimize the chance of spreading infection. The following has been developed and agreed upon with *UCSF Hospital Epidemiology and Infection Control (HEIC)* and *UCSF Occupational Health Services (OHS)*:

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1. Consider the findings as urgent (similar to incidental pulmonary embolism).
2. The findings require nonroutine communication (telephone call or in-person communication) with the ordering provider. Additional communication with UCSF OHS and the imaging acquisition team is necessary in order to initiate possible subsequent contact tracing and to alert staff of potential exposures. The final report should include documentation of communication.
 - a. Contact the ordering provider to report the imaging findings of possible COVID infection.
 - b. Report the potential exposure to UCSF OHS by calling the COVID-19 escalation line at (415) 476-8000. If the line is not answered, please leave a message with the name of the patient and their MRN. If preferred, an email can be sent to ohs@ucsf.edu.
 - c. Contact the appropriate modality manager at the site where the study was performed and report the potential exposure. Please see **Table 1** for points of contact at each of the imaging sites.
 - d. Please document these communications using the dictation macro “incidental virus” in PowerScribe 360.
3. If the referring provider has questions, you can refer them to the COVID-19 information website (<https://infectioncontrol.ucsfmedicalcenter.org/coronavirus>), where numerous algorithms for patient triage, based on symptoms and exposure history, are available. You may also provide them with the UCSF COVID Hotline (415-514-7328), which is staffed Monday-Friday 8AM-5PM and weekends 8AM-2PM.
4. If the affected staff has questions regarding the next steps, you can refer them to the UCSF Continue to Work – Return to Work Guidelines for Staff ([detailed guidelines available here](#)). For more information about contact tracing, you can refer them to [this document](#).
5. UCSF allows the radiologist to decide on the wording of “COVID-19 pneumonia” versus simply “viral pneumonia” in the final report. However, nonroutine communication (as described above) **MUST** include the possibility of COVID-19 pneumonia (see RSNA statement for more information).

If there are any questions, please do not hesitate to call the chest radiology reading room (415-353-9527) to discuss the case.

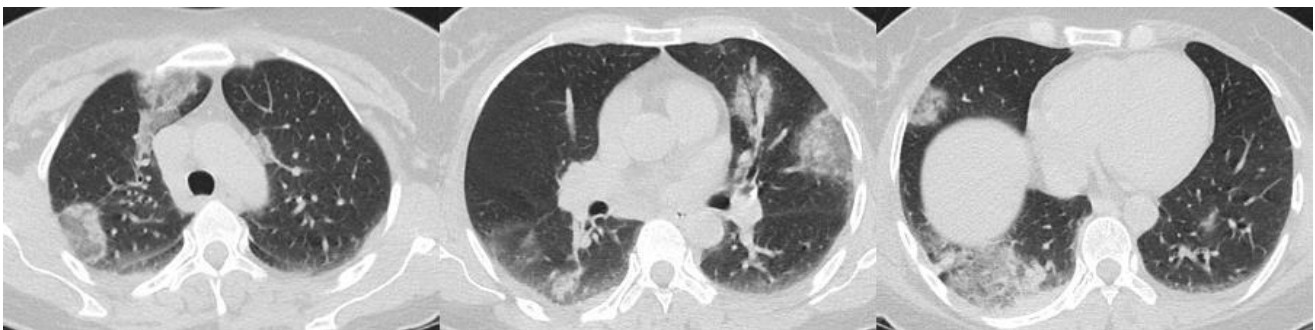


Figure 1 – Example of “typical appearance” of COVID-19 pneumonia, showing rounded and peripheral areas of GGO and consolidation.

Table 1 – Radiology Modality Manager Contact Information

CT			
Parnassus/MZ			
CT Pager for all sites: (415) 443-5411 (24/7)			
Jessica Pfannenstiel	Rad Svc Manager 1	Jessica.Pfannenstiel@ucsf.edu	353-8784
Doug Avadikian	Rad Svc Supvr 2	Douglas.Avadikian@ucsf.edu	353-2066
PCMB/MB/CB			
Kyle Thornton, Supervisor	Rad Svc Supvr 2	Kyle.Thornton@ucsf.edu	502-9775
Diagnostic (X-Ray)			
Parnassus			
Alpana Patel Camilli	Rad Svc Manager 1	Alpana.PatelCamilli@ucsf.edu	514-0963
Lisa Burke	Rad Svc Supvr 2-Day	Lisa.Burke@ucsf.edu	353-2565
David Poon	Rad Svc Supvr 2-Evening	David.Poon@ucsf.edu	353-9161
Mission Bay / PCMB			
Jeff Geiger	Rad Svc Manager 1	Jeffrey.Geiger@ucsf.edu	502-9774
Dave Gospe	Rad Svc Supvr 2	David.Gospe@ucsf.edu	502-9773
Michael Griffith	Rad Svc Supvr 2	Michael.Griffith@ucsf.edu	502-9772
Radiology Adult MB	Room C-1408		476-1568
Radiology Adult MB	Room C-1422		476-1562
Mount Zion			
Chester Lim	Rad Svc Supvr 2	Chester.Lim@ucsf.edu	885-3653
Orthopaedic Institute			
Jessica Nemeth Sloss	Rad Svc Supvr 2	Jessica.Sloss@ucsf.edu	514-6125
MRI			
Parnassus/MZ			
MRI Ops Pager for all sites: (415) 443-5408			
Craig Devincent	Rad Svc Manager 1	Craig.Devincent@ucsf.edu	502-9776 353-4953 (CB)
Peggy Woodward	Rad Svc Supvr 2	Peggy.Woodward@ucsf.edu	502-4099
3N MRI			514-6031
UCIC-AC-05/11 Irving			353-2506
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Mission Bay			
Michael White	NucMed Supvr 2	Michael.White@ucsf.edu	476-1100
Parnassus			
Chloee Wendorf	NucMed Supvr 2	Chloee.Wendorf@ucsf.edu	353-1693
Ultrasound			
Parnassus			
Chelsy Coco	Rad Svc Manager 1	Chelsy.Coco@ucsf.edu	353-9264
Caitlin Duddleston	Rad Svc Supvr 2	Caitlin.Duddleston@ucsf.edu	514-5540
Ultrasound-ACC Work Area			353-2574
Mission Bay/PCMB			
Jennifer Paoletti	Rad Svc Supvr 2	Jennifer.Paoletti@ucsf.edu	502-8654

References

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