

Letters to the Editor

Chest Radiograph Findings in Asymptomatic and Minimally Symptomatic Quarantined Patients in Codogno, Italy during COVID-19 Pandemic

From

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Editor:

The article by Dr. Pan and colleagues published online in *Radiology* in February 2020 (1) reports the progression of lung involvement at CT in symptomatic patients recovering from coronavirus disease 2019 (COVID-19) pneumonia.

On February 20, 2020, the first case of COVID-19 was reported in Codogno, Italy (2). On February 23, Italian health authorities ordered strict containment measures to control the infection, imposing a quarantine “red zone” in Codogno and 10 surrounding towns. Local hospitals closed and the population was quarantined at home for 14 days.

Our private clinic reopened at the end of the 14-day quarantine period. At that time, we had a high demand for chest radiographs from local asymptomatic patients or patients with vague symptoms such as temperature less than 99.5°F (37.5°C) and malaise. None of the patients had high clinical suspicion for COVID-19, but many patients were worried about community spread. In addition, all patients came from a very contagious cluster at high risk of virus transmission.

In one week, we found 100 of 170 (59%) chest radiographs (mean patient age, 57 years \pm 16 [standard deviation]) with abnormalities highly suspicious for COVID-19 pneumonia (3). Involvement was bilateral in all cases: in

54% of patients the involvement was symmetrical, while chest radiograph abnormalities were greater on one side of the chest in 46%. Reverse transcriptase–polymerase chain reaction (RT-PCR) swabs were not performed for confirmation. The prevalence of abnormal chest radiographs was similar to that reported by Inui et al (4), who reported CT findings in patients with COVID-19 from the Diamond Princess cruise ship (ie, 54% of asymptomatic passengers had chest CT abnormalities).

Our findings support data that is emerging about asymptomatic carrier transmission of COVID-19: asymptomatic or minimally symptomatic patients may have positive chest radiographs after 14 days of quarantine, even with no RT-PCR testing for COVID-19 (sensitivity reported to be 59% by Ai et al [5]). Chest radiographs may represent a low-cost and widely available tool in detecting lung involvement in patients with possible COVID-19 pneumonia. However, the specificity of chest radiograph findings for COVID-19 pneumonia is not established.

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