The 2019 novel coronavirus disease (COVID-19) was firstly identified in Wuhan, Hubei Province, China. In China, the data on 29 Feb 2020 showed the fatality rate was 3.6% (2,835/79,251) with most deaths occurred in Wuhan. The fatality rate outside of Hubei province was 0.85% (111/13,052), with seven provinces/regions without death cases (1). According to recommendation, persons with contacts and suspicious exposure are advised to have a 14-day health observation period. Once they display any symptoms, they should seek medical attention immediately. Suspected cases are those with epidemiologic risk and with clinical features. Confirmed cases are diagnosed with pathogenic evidence.

Despite many literature reports on CT features of COVID-19, we argue the role of CT for COVID-19 patients' management remain poorly defined (2). Of note, the case report from USA used serial radiographs to monitor the lung infiltrates change over time (3), and the patient group in Germany did not report imaging test (4). In addition to the widespread application of chest CT for COVID-19 patients, recently a large proportion of hospitals outside Wuhan/Hubei in China use chest CT scan as a COVID-19 screening tool for all in-patients who are hospitalized with illnesses un-related to COVID-19, despite they don’t have contact history or respiratory symptoms. In some places, chest CT is used as a COVID-19 screening tool for employees assuming work after the Spring Festival break. We estimate the volume of incurred chest CT scans will be in tens of millions.

Chest CT to screen COVID-19 may not be sensitive. Initial reports have been focused on severe patients and reported high chest CT positive rate. For milder cases, the chest CT positive rate will be much lower (5). To our knowledge, chest CT positive rate among asymptomatic COVID-19 patients remain unknown (6,7). Moreover, a negative chest CT does not rule out this disease for COVID-19 patients during their contagious latency period. The burdens of CT include the CT procedure induced virus transmission as well as oncogenic radiation.

We advocate screening for COVID-19 should focus on the contact history, symptoms, pathogenic evidence, and early isolation for suspected cases. There is no scientific evidence to recommend the use of chest CT as a screening tool for asymptomatic subjects without contact history. Excessive CT scans in a large population may lead to substantial long-term burdens on the society.

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Footnote

Conflicts of Interest: All authors have completed the ICMJE uniform disclosure form (available at http://dx.doi.org/10.21037/qims.2020.04.02). The authors have no conflicts of interest to declare.

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