Pulmonary Pathology of Early Phase 2019 Novel Coronavirus Pneumonia

To the Editor:
We read the publication on “Pulmonary pathology of early phase 2019 novel coronavirus (COVID-19) pneumonia in two patients with lung cancer” with great interest.1 Tian et al.1 concluded that “the lungs of both patients exhibited edema, proteinaceous exudate, focal reactive hyperplasia of pneumocytes with patchy inflammatory cellular infiltration, and multinucleated giant cells” and noted that “these changes likely represent an early phase of the lung pathology of COVID-19 pneumonia.” Although this pathologic finding might be a lung abnormality in COVID-19, it should not be referred to as COVID-19 pneumonia because the patients did not have pneumonia. In a previous report of a case with pneumonia and severe respiratory distress, fibromyxoid exudates and hyaline membrane formation were the main histopathologic findings.2 Asymptomatic or mildly symptomatic COVID-19 is possible3 and the pathologic findings in the lungs mentioned by Tian et al.1 should correspond to that case.

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References

Pathology of 2019 Novel Coronavirus Pneumonia: A Dynamic Disease Process

To the Editor:
Thank you for forwarding the letter by Joob and Wiwanitkit1 regarding our recent paper “Pulmonary pathology of early phase 2019 novel coronavirus (COVID-19) pneumonia in two patients with lung cancer.”2 We thank Dr. Joob and Dr. Wiwanitkit for their interest in our work and appreciate their comments.

In our paper, we described two patients who came to the hospital for elective surgical resections of SCLC at the time when COVID-19 was spreading in Wuhan and even more so in hospitals, but when stringent infection preventive measures had not yet been implemented owing to low public awareness. Afterward, both patients were confirmed to have developed COVID-19 pneumonia. Retrospective reviews revealed radiographic changes in the patients’ lungs around the time of the operation. Both patients had a history of exposure to the virus. Although the patients did not exhibit symptoms at the time of the operation, subsequent pathologic examination revealed changes as reported in the paper;3 thus, this represents the early changes seen in COVID-19 pneumonia. As we know, many diseases can have radiographic or pathologic changes before clinical symptoms develop.

To be more specific, what the physician finds and what the patient feels are not always synchronized. Post operation on day 1, patient 1 had increased white blood cell count and lymphocytopenia, which are not consistent with the usual nonspecific postoperative responses.

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