

Mediastinal lymphadenopathy in patients with severe COVID-19

CT has a leading place in the management of patients with coronavirus disease 2019 (COVID-19). Mediastinal lymph node enlargement is not considered a typical CT feature of COVID-19, and only 6% of patients admitted to hospital for COVID-19 had lymphadenopathy.¹ This observation is concordant with previous studies in Chinese populations.^{2,3} However, our experience in critically ill patients with COVID-19 in France seems to be different.

15 patients with positive RT-PCR for severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) were admitted to our intensive care unit (ICU) for acute respiratory failure on March 27, 2020. Among them, nine patients were under invasive mechanical ventilation and one patient was also under extracorporeal membrane oxygenation, whereas two patients were under high-flow nasal canula oxygenation. CT examination was performed in nine patients, with typical ground-glass opacities,

reticulation, or consolidation features observed in all patients, as described in a recent expert consensus statement on chest CT findings related to COVID-19.⁴ The median number of days between onset of symptoms and CT scans was 7 days (IQR 6–8). Lymphadenopathies greater than 10 mm in the short axis were observed in six (66%) of the nine patients. Notably, several patients had voluminous lymphadenopathies, particularly in the subcarinal location, measuring up to 30 mm in the short axis (appendix). Invasive microbiological samples were assessed to rule out bacterial or fungal coinfection in all patients. Similarly, no patient had any haemophagocytic lymphohistiocytosis, neoplasia, or systemic disease.

Thus, lymphadenopathy was more common in our French cohort of ICU patients than previously reported. To our knowledge, highly enlarged mediastinal lymph nodes have not been described in patients with COVID-19. Most reports were not specifically concerning critically ill patients, so disease severity could probably explain this discrepancy, as suggested by Li and colleagues.⁵ Further studies are needed to better characterise the CT features of patients

with COVID-19, in order to establish a possible link between the presence of specific radiological signs and the severity of the disease. Pending such studies, lymphadenopathy should not be considered an atypical feature of COVID-19, especially when we have seen that mediastinal lymph nodes are very large in our critically ill patients.

We declare no competing interests.

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- 1 Shi H, Han X, Jiang N, et al. Radiological findings from 81 patients with COVID-19 pneumonia in Wuhan, China: a descriptive study. *Lancet Infect Dis* 2020; **20**: 425–34.
- 2 Huang C, Wang Y, Li X, et al. Clinical features of patients infected with 2019 novel coronavirus in Wuhan, China. *Lancet* 2020; **395**: 497–506.
- 3 Chen N, Zhou M, Dong X, et al. Epidemiological and clinical characteristics of 99 cases of 2019 novel coronavirus pneumonia in Wuhan, China: a descriptive study. *Lancet* 2020; **395**: 507–13.
- 4 Simpson S, Kay FU, Abbara 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. *Radiol Cardiothorac Imag* 2020; published online March 25. DOI:10.1148/ryct.2020200152.
- 5 Li K, Wu J, Wu F, et al. The clinical and chest CT features associated with severe and critical COVID-19 pneumonia. *Invest Radiol* 2020; published online Feb 29. DOI:10.1097/RLI.0000000000000672.



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See Online for appendix