

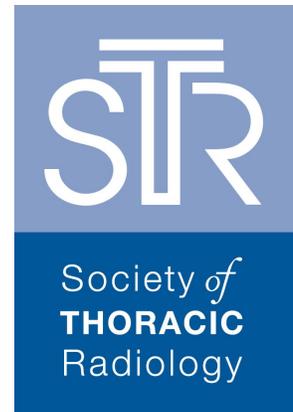
SOCIETY OF THORACIC RADIOLOGY

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STR ALERT: PNEUMONIA ASSOCIATED WITH THE 2019 NOVEL CORONAVIRUS (2019-NCOV)

A novel coronavirus was identified in January and named 2019-nCoV after multiple cases of pneumonia of unknown etiology were reported in Wuhan, China starting in December 2019. Coronavirus infections in human mostly cause respiratory tract infections, usually with mild symptoms though different strains of coronaviruses were also responsible for Severe Acute Respiratory Syndrome (SARS) and Middle East Respiratory Syndrome (MERS) (1-3).

As of February 2, 2020, 14,642 confirmed cases of 2019-nCoV infection has been reported in 27 countries and territories (4). The vast majority of affected patients are in China with only 180 cases outside of China, mainly in people who have recently travelled to China and their close contacts. We felt it is important to alert the STR community because the outbreak has been declared a global health emergency by the World Health Organization (WHO) with increasing number of cases around the world.

Common presenting symptoms for patients with confirmed infection include fever, cough, and myalgia and fatigue (1-3). Published reports of imaging characteristics of 2019-nCoV pneumonia remain limited at this time. According to an early report from China, abnormal CT findings are found in all confirmed cases (1). In the early phase, the most common findings consist of bilateral patchy ground glass opacities with peripheral and lower lobe predominance without subpleural sparing. As the disease progresses, consolidation develops and findings of acute respiratory distress syndromes (ARDS) are frequent in patients requiring intensive care unit (ICU) admission. Intrathoracic lymphadenopathy and pleural effusions are uncommon findings (2, 5). Chest radiographic (CXR) findings include bilateral patchy opacities (3, 6) though CXR are considered unreliable in detecting early phase of the pneumonia (5, 7).

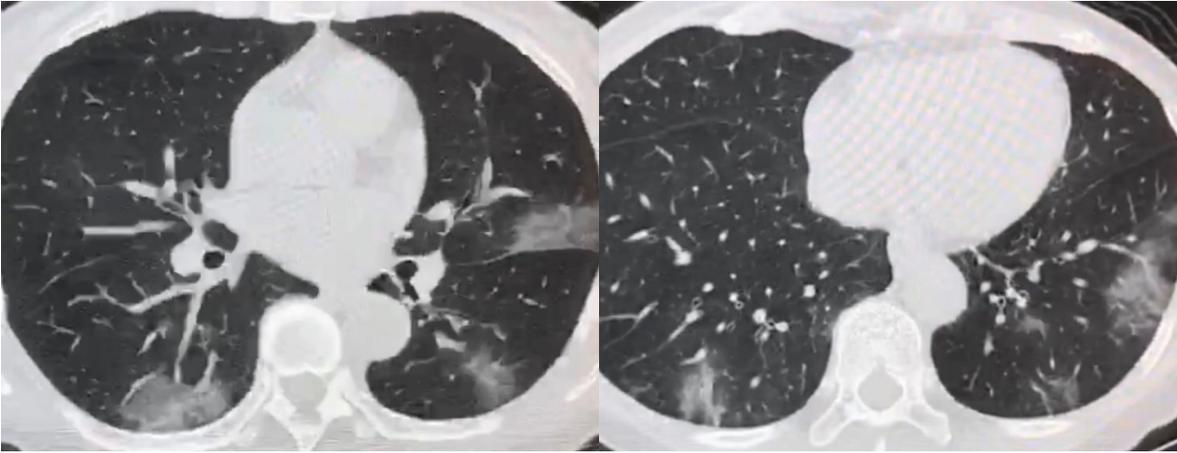


Figure 1. Patient with confirmed 2019-nCoV infection and bilateral patchy ground glass opacities. (Case courtesy of Dr. Hongjun Li, Beijing, China)

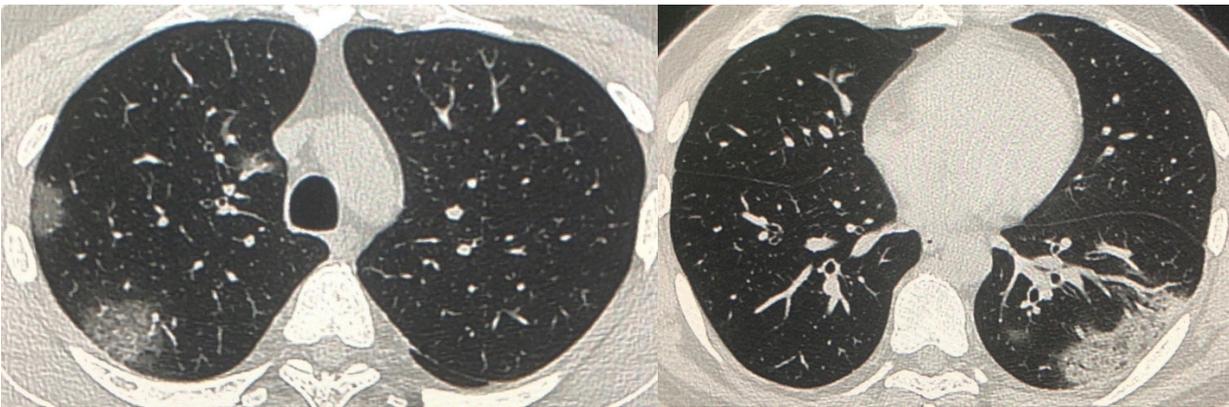


Figure 2. A different patient with confirmed 2019-nCoV infection with peripheral patchy ground glass and consolidative opacities. (Case courtesy of Dr. Hongjun Li, Beijing, China)

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