



Radiologists' Solutions for COVID-19 in Korea

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Dear Editor,

We read the article by Chen et al. (1) with great interest. They have described the emergency management procedure and infection control in the radiology department during the coronavirus disease (COVID-19) outbreak. They emphasize radiologists' preparedness in infection control and share their experience in a pandemic environment. In this letter, I would like to introduce and share our experience on how radiologists have supported the fight against COVID-19 in South Korea.

After the first COVID-19 case was reported in January 19, 2020, the number of confirmed cases in South Korea has increased rapidly in February and March through a specific religious group. At that time, radiologists in Korea did not know much about this new virus. However, communication between members and the leadership of the Korean Society of Radiology (KSR) and the Korean Society of Thoracic Radiology (KSTR) has properly guided the fight against this new virus.

During the peak of COVID-19 in South Korea in February, radiologists who had earlier encountered COVID-19 patients informed other radiologists of the imaging features of COVID-19 via short message services (SMS) (2). They also provided useful tips on the management of these patients in the radiology department. At the same time, papers on

COVID-19 in South Korea were published ahead of print in the Korean Journal of Radiology (3, 4) and announced to radiologists via e-mail.

The KSTR formed a task force team focused on COVID-19 and initiated a project to establish a COVID-19 library on the KSTR Weekly Chest Cases web page (<https://kstr.radiology.or.kr/weekly/>) (2) and Korean Imaging Cohort of COVID-19 (KICC-19) (5). As the KSTR Weekly Chest Cases web page has worldwide readership, it was considered a useful platform to disseminate the imaging features of COVID-19 domestically and internationally. With the support of KSTR members, 14 cases were posted on the web page (<https://kstr.radiology.or.kr/weekly/corona/>), with an independent menu specifically designed for information on COVID-19 cases. Since the cases were posted, visitors to the web page have increased by 13000, with approximately 5000 views on the COVID-19 cases page specifically (2).

The KSTR also initiated the KICC-19, with the aim of providing imaging guidelines for COVID-19, forming a resource that can help upskill thoracic radiologists in daily clinical practice and creating imaging depositories enabling researchers to do various studies (5). Till date, more than 400 cases from 18 institutions have been collected in the KICC-19 depository.

The Guidelines for the Use of Diagnostic Imaging for COVID-19 was developed in early April 2020 by the combined efforts of the KSR and KSTR (6). This simple guideline was made in the context of the Korean medical environment. In this guideline, diagnostic imaging studies are not routinely recommended for patients suspected with COVID-19 because the reverse transcription polymerase chain reaction (RT-PCR) test is widely used for initial examination in South Korea. CT is not recommended for screening for the same reason, although CT is more sensitive in detecting COVID-19 pneumonia than chest radiography.

Articles on imaging studies of COVID-19 in Korea have continuously been published, enriching the knowledge on this disease (7-9). After the peak in February and March, the number of newly diagnosed patients has decreased and flattened until now. Currently, 12715 patients have been infected with a mortality rate of 2.2% (10).

With the previous experience from the Middle East Respiratory Syndrome outbreak, radiologists in South Korea have rapidly and adequately reacted to COVID-19.

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In particular, digital tools like SMS, web pages, and on-line journals are emerging as major tools to spread the knowledge about this new and unknown disease to medical professionals. Hopefully, this experience will improve our response to other novel diseases in the future.

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