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COVID-19 Protection Guidelines in Outpatient Medical Imaging Centers

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To the Editor,

In December 2019 a pneumonia of strange source broke out in Wuhan, China and swiftly spread around the world. The pathogen was the novel corona virus (2019) (1,2). Imaging findings on chest CT of ground glass opacities with peripheral distribution were helpful for diagnosis of COVID-19 (3) and increased the role of radiology departments in this pandemic. Accordingly, radiologists and especially radiology technologists are among the first-line health care workers that might be exposed to patients with the COVID-19.

Diagnostic imaging equipment should have guidelines in place to examine individuals with confirmed or suspected of COVID-19 infection and prevent the spread of the disease to others. The COVID-19 virus is profoundly infectious and transmitted within respiratory droplets, but there is doubt as to whether the virus can be transmitted by touching a surface (4). The Iranian Society of Radiology created a guideline for the protection of patients and health care workers in outpatient imaging centers, including principles for the types of equipment and regularly sanitizing the radiology department along the guideline made by the WHO

or CDC (5). These include preventing the waiting room from becoming crowded, installing a banner at the entrance of the department to inform patients of COVID-19 symptoms, and disinfecting imaging equipment after each use. In the case of ultrasound, more attention should be paid to disinfecting the probes, the probe cables, the keyboard and touch screen, the gel tube, and any other area where there is hand-operated contact. For the ultrasound probe, it is better to cover the probe which can be done with latex gloves, and then disinfect the probe cover with 70% alcohol after each patient. Disposable glasses should be in a closed container so they can be taken out individually and without contamination of the rest of the glasses and after use. All trash cans must have doors. All masks, gloves, and gauges should be placed in the right buckets after use.

Patients should not come with companions. Since each patient may have a subclinical infection or be in the incubation period and spread the virus to others, patients should wear a surgical mask and gloves before entering the imaging center. It is recommended that if the patients arrive wearing gloves, they should be changed at the beginning of the visit. Patients should be aware of the importance of using masks and gloves to protect themselves and other patients. At the end of the exams, all of the patients should immediately exit the center.

All personnel (physician, technician, receptionist, etc.) should have full protective cover or at least have a mask and gloves (latex sterile gloves are preferable) and, if possible, disposable sleeves, face shields, and standard alcohol wipes. All staff must avoid touching their face or mask and must wash their hands with soap and water for 30 seconds regularly and after visiting each patient. Staff should also maintain maximum distance from patients, and avoid touching the bank card of clients. Eating and drinking must be avoided as much as possible. Ultimately, all personnel, if they have the slightest clinical sign, should inform the head of the institute.

This guideline reduces the transmission rate of the virus, and it is the only way to save lives.

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