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Editorial

# Editorial: Nuclear Medicine Practices during COVID-19 Pandemic

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## EDITORIAL

The comparatively privileged fact of nuclear medicine is that most of the scans and treatments are addressed as follow-up cases in the outpatient clinic, while experimental trials are typically handled following COVID-19 scanning in the inpatient department. An unfortunate truth, on the contrary, is that nuclear medicine lacks handheld SPECT and PET scanners, there is a continuous need to administer radiopharmaceuticals into patients so that the mobility of patients cannot be limited. Having detailed knowledge of precautionary steps to prevent the spread of COVID-19 is also very crucial for nuclear medical personnel. A variety of papers have been written covering divisions of radiology by far, Guidelines for the Department of Nuclear Medicine are also sparse. Many heart patients who have to undergo nuclear cardiology operations are typically over 60 years of age and may have other extreme health complications, such as diabetes, asthma, and chronic kidney and pulmonary disease. Both of these aspects render them particularly vulnerable to serious situations arising from COVID-19. There is a strong need for a comprehensive collection of guidelines on portable scanners, patient interaction and scan length, and the urgency of management that has been formulated here.

Nuclear medicine employees are also among the first-line health workers who are likely to be exposed to COVID-19. Both such facilities should provide adequate protocols for working with suspected or known patients with COVID-19, since it is a highly infectious virus. It is mainly transmitted through respiratory droplets; however, it is likely to be transmitted via contact with a polluted object or surface (fomite). Both healthcare staff must also have a thorough knowledge of all their practicable routes of transmission to ensure the welfare of their patients and their wellbeing. They are more likely to disperse within a radius of 3 feet, but can also travel up to 6 ft, as far as the respiratory droplets are concerned.

On 4 March 2020, the World Health Organization (WHO) recommended that, in the absence of an aerosol generation procedure, respiratory safety should be assured by using a regular surgical mask in all health care facilities. However, when operating near COVID-19, specialized recommendations released by the Centers for Disease Control and Prevention (CDCP) suggest the use of N95 or higher filtration masks. It has also been advised to arrange droplet protection for personal protective equipment (PPE), including a fluid-resistant disposable robe, disposable gloves protecting gown cuffs, face mask, and eye goggles. Various studies on healthcare professionals who have been exposed to coronavirus have demonstrated that if touch and droplet diffusion occur, viral transmission can be dramatically decreased. Overall, departments of nuclear medicine should remain highly alert to perpetrators of COVID-19 and should ensure conformity with the following WHO and regional/institutional precautionary and control measures:

- Installing hand sanitizer dispensers at all possible positions in the department of nuclear medicine and ensuring that anyone who walks by uses them. Their frequent refilling should also be assured. It is important to allow full use of numerous networking resources such as posters and flexes, intranet banners, and interactive staff meetings to incline individuals to respiratory and sanitary steps.
- With any interaction with positive or suspected patients, potentially polluted surfaces such as ultrasonic probes, MRI and CT screening portals, blood pressure measuring cuffs, both keyboards, and mice must be thoroughly disinfected. As per international guidelines, either washing with soap/detergent water or using disinfectants such as isopropyl alcohol, ethyl alcohol, iodophor, or sodium hypochlorite will achieve this disinfection.
- For high-risk surfaces to be washed professionally, exclusive preparation of environmental service providers should be performed. For the specific and safest disinfectant supply, the respective suppliers of each device should be contacted.
- If any of the team members have mild signs of COVID-19, they should be told to remain at home for a detailed clinical review.

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