

A new era for nuclear medicine

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The coronavirus COVID-19 pandemic is the defining global health crisis of our time. Health care systems globally are amid an unprecedented challenge. Since its emergence in December 2019 in Wuhan, China, the virus has spread to 185 countries worldwide, with more than 2.63 million cases confirmed and more than 183 thousand related deaths (as of 23/04/2020) [1]. According to current evidence, the novel coronavirus is transmitted from human-to-human mainly via respiratory droplets of different sizes, contact with bodily fluids, or from contaminated surfaces [2]. In the context of COVID-19, airborne transmission may be possible in specific circumstances and settings in which procedures that generate aerosols are performed [3]. The common clinical symptoms of the highly pathogenic and large-scale epidemic virus include fever, cough, fatigue, ageusia and anosmia and in some patients, gastrointestinal infection symptoms. The elderly and patients with comorbidities are susceptible to infection and prone to severe complications, which may be associated with acute respiratory distress syndrome (ARDS) and cytokines storm. Currently, there are few specific antiviral strategies, but several potent candidates of antivirals and repurposed drugs are under urgent investigation [4]. Under these circumstances, it is critical for health care settings, including nuclear medicine departments to take infection control measures, to prevent a potential spread not just among patients but also to staff members as well as to reconsider the performance of randomized clinical trials.

There have already been papers on the radiology preparedness that should be applied to radiology and nuclear medicine departments to support the care of patients with COVID-19 and maintain radiologic diagnostic and interventional support for the entirety of the hospital and healthcare system, particularly for emergencies, without jeopardizing an outbreak in the units [5, 6]. Since most nuclear medicine diagnostic and therapeutic interventions are non-urgent, the general guidance from the International Atomic Energy Agency (IAEA) for infection prevention and control is to postpone scheduled procedure after cautious risk assessment, with certain exceptions [7]. Individualized approach of each case is a sine qua non of ensuring low transmission of COVID-19 as well as effective and safe management of patients admitted to nuclear medicine departments. Another major issue raised is the possible impact COVID-19 on the transport of medical radioisotopes. By the 1st of April 2020, the Euratom Supply Agency (ESA) co-chaired the European Observatory on Supply of Medical Radioisotope expressing their concerns related to the impact of COVID-19 on the supply chain and in consequence on the availability of the most vital medical radioisotopes used in nuclear medicine. Due to the current lockdown situation, extended border controls, reductions and elimination of many commercial passenger flights, competition and cost of cargo and charter options, require appropriate additional support [8].

The new era of nuclear medicine practice worldwide coincides with a new era for the Hellenic Society of Nuclear Medicine (HSNM) and the Hellenic Journal of Nuclear Medicine (HJNM). The founder and Editor in Chief for more than 28 consecutive years, Professor Emeritus Philip Grammaticos, resigned leaving behind a benchmark for the presidencies and editors to come. His commitment to the conservation of a high level of scientific excellence of the published papers is the legacy which we wish to maintain in the future publications. The interim Editor in Chief of the current issue, would like to express her gratitude to Professor Emeritus Philip Grammaticos for his contribution to the global scientific community as well as to the incoming Editor in Chief Konstantinos Anagnostopoulos, MD, PhD, FRCP, FESC for accepting this new role. We wholeheartedly welcome the new Editor in Chief and the new members of the Editorial Board, wishing them an active, attentive and successful mandate. Hellenic Journal of Nuclear Medicine will remain true to the set principles, values and past and prepared to cope with future challenges in the scientific and clinical setting.

Bibliography

1. Coronavirus Resource Center. John Hopkins University and Medicine. Available at: <https://coronavirus.jhu.edu/map.html>. Accessed: April 23, 2020.

2. Chan JF, Yuan S, Kok KH et al. A familial cluster of pneumonia associated with the 2019 novel coronavirus indicating person-to-person transmission: a study of a family cluster. *Lancet* 2020; 395(10223): 514-23.
 3. van Doremalen N, Morris D, Bushmaker T et al. Aerosol and Surface Stability of SARS-CoV-2 as compared with SARS-CoV-1. *New Engl J Med* 2020. doi: 10.1056/NEJMc2004973. [Epub ahead of print]
 4. Yan-Rong Guo, Qing-Dong Cao, Zhong-Si Hong et al. The origin, transmission and clinical therapies on coronavirus disease 2019 (COVID-19) outbreak – an update on the status. *Mil Med Res* 2020; 7: 11.
 5. Kooraki S, Hosseiny M, Myers L, Gholamrezanezhad A. Coronavirus (COVID-19) Outbreak: What the Department of Radiology Should Know. *J Am Coll Radiol* 2020; 17(4): 447-51.
 6. Huang HL, Allie R, Gnanasegaran G, Bomanji. COVID-19 -Nuclear Medicine Departments, Be Prepared! *J Nucl Med Commun* 2020; 41(4): 297-9.
 7. Notghi A, Pandit M, O'Brien J, Vinjamuri S. International Atomic Energy Agency (IAEA) Webinar held in 26th March 2020. Available at: https://cdn.ymaws.com/www.bnms.org.uk/resource/resmgr/news_&_press_office/news/26-03-2020_nuclear_medicine_.pdf. Accessed: March 26 2020.
 8. Euratom Supply Agency. Possible impact COVID-19 on the transport of medical radioisotopes. Available at: <http://nuclearmedicine.euratom.eu/wp-content/uploads/2020/04/ESA-COMMUNICATION.pdf>. Accessed: April 1, 2020.
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