

Letter to the Editor

Positron emission tomography-computed tomography use during the COVID-19 pandemic outbreak

Sir,

The severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2), which first appeared in Hubei/China, has spread worldwide quite rapidly since December 2019.^[1] In the current scenario, it is difficult to predict when and how long the pandemic will continue. Patients with cancer are also more susceptible to infection and more likely to have serious events due to the immunosuppressive condition. However, it seems as though patients of oncology were not included in the management strategies during this pandemic; they must be remembered and be able to continue their treatments.

The coordination of cancer management is always important, even during this pandemic outbreak. The approach to cancer patients should be dynamic and continuous and should be adapted according to the patient's and hospital conditions and the doctor's experience.^[2] However, it should not be forgotten that the necessary precautions should be kept at a high level to prevent contamination in patients in during this period, and the contact of patients should be reduced as much as possible, and patients should be treated in isolated units.

COVID-19 pneumonia is 18F-fluorodeoxyglucose (FDG) avid and might be detected as an incidental finding in asymptomatic patients who underwent positron emission tomography-computed tomography (PET/CT) for malignancy.^[3] In addition to its indisputable benefits on cancer imaging, studies reported the PET/CT results of patients with fever and suspected malignancy who had PET/CT scans, and later, these patients were diagnosed with COVID-19 pneumonia.^[4] In those PET/CT examinations, peripheral ground-glass opacities and consolidation areas were scattered with intense FDG uptake in both lungs being observed.^[4]

Although PET/CT is not routinely used in benign diseases, the clinical benefits are indisputable in certain instances. The current findings suggest that PET/CT provides metabolic and anatomic information that can play a complementary diagnostic role in the early stage of COVID-19 pneumonia. Furthermore, this technique can be useful for rapid detection, early isolation, and the implementation of treatment in patients during the early infection stage of SARS-CoV-2. Nuclear medicine physicians should be aware of incidental PET/CT findings that may be secondary to COVID-19 exposure/infection.

The functioning of the nuclear medicine department depends on the supply of radiopharmaceutical products that are not produced locally in many PET/CT centers. Therefore, the vast majority of nuclear medicine centers are dependent upon the external resources of national and international suppliers and distribution companies. PET/CT centers without cyclotron, the procurement of FDG, depend on local conditions during this pandemic period. In this scenario, there is a problem with radiopharmaceutical supply in the nuclear medicine departments.

We know that staging, treatment plans, treatment changes, and re-staging of many patients with cancer are decided using the PET/CT. PET/CT is crucial for the management of patients with malignancies. Inability to perform PET/CT examination adversely affects the management of cancer patients and causes delays in the treatment in the oncology center. PET/CT sheds light on the course of the patients with cancer, and it is indispensable for these patients. PET/CT center managers should find suppliers and make the necessary organizations to acquire sufficient supplies of radiopharmaceutical to prevent the victimization of patients with cancer.^[5] The local governments should give support PET/CT centers by acquiring radiopharmaceutical supplies for patients with cancer. As Celine Dion said, "Life imposes things on you that you can't control, but you still have the choice of how you're going to live through this."^[5]

Financial support and sponsorship

Nil.

Conflicts of interest

There are no conflicts of interest.

Sibel Goksel, Sema Yilmaz Rakici¹

Departments of Nuclear Medicine and ¹Radiation Oncology, Faculty of Medicine, Recep Tayyip Erdogan University, Rize, Turkey

For correspondence:

Dr. Sibel Goksel,
Department of Nuclear Medicine, Faculty of Medicine, Recep Tayyip
Erdogan University, Rize 53100, Turkey.
E-mail: sibelkandemirgoksel@gmail.com

Submitted: 24-May-2020

Revised: 16-Jul-2020

Accepted: 15-Sep-2020


Published: 11-Jun-2021

Letter to the Editor

REFERENCES

1. Zhu N, Zhang D, Wang W, Li X, Yang B, Song J, *et al.* A novel coronavirus from patients with pneumonia in China, 2019. *N Engl J Med* 2020;382:727-33.
2. Moujaess E, Kourie HR, Ghosn M. Cancer patients and research during COVID-19 pandemic: A systematic review of current evidence. *Crit Rev Oncol Hematol* 2020;150:102972.
3. Albano D, Bertagna F, Bertoli M, Bosio G, Lucchini S, Motta F, *et al.* Incidental findings suggestive of COVID-19 in asymptomatic patients undergoing nuclear medicine procedures in a high-prevalence region. *J Nucl Med* 2020;61:632-36.
4. Qin C, Liu F, Yen TC, Lan X. 18F-FDG PET/CT findings of COVID-19: A series of four highly suspected cases. *Eur J Nucl Med Mol Imaging* 2020;47:1281-6.
5. Gnanasegaran G, Williams J, Huang HL, Bomanji JB. Coronavirus pandemic: What the nuclear medicine departments should know. *J Nucl Med Technol* 2020;48:89-97.

This is an open access journal, and articles are distributed under the terms of the Creative Commons Attribution-NonCommercial-ShareAlike 4.0 License, which allows others to remix, tweak, and build upon the work non-commercially, as long as appropriate credit is given and the new creations are licensed under the identical terms.

Access this article online	
Website: www.cancerjournal.net	Quick Response Code: 
DOI: 10.4103/jcrt.JCRT_683_20	

Cite this article as: Goksel S, Rakici SY. Positron emission tomography-computed tomography use during the COVID-19 pandemic outbreak. *J Can Res Ther* 2021;17:574-5.

© 2021 Journal of Cancer Research and Therapeutics | Published by Wolters Kluwer - Medknow