Molecular Oncologic Imaging

http://publish.mersin.edu.tr/index.php/moi/index

Generalized Large Vessel Arteritis Determined by F-18 FDG PET/CT In A Patient With Lung Mass

Zehra Pınar KOÇ[1], Pelin Özcan KARA[2] Cengiz ÖZGE [3] Gökçe YAVAN[4]

[1]*Mersin University, Faculty of Medicine, Department of Nuclear Medicine, Mersin, Turkey, zehrapinarkoc@gmail.com*
[2]*Mersin University, Faculty of Medicine, Department of Nuclear Medicine, Mersin, Turkey, ppelinozcan@gmail.com*
[3]*Mersin University, Faculty of Medicine, Department of, Respiratory Medicine, Mersin, Turkey, cengizozge@yahoo.com*
[4]*Mersin University, Faculty of Medicine, Department of Nuclear Medicine, Mersin, Turkey, gyavan95@gmail.com*

Cite this study: Koç, Z. P., Kara, P. Ö., Özge, C. & Yavan, G. (2021). Generalized Large Vessel Arteritis Determined by F-18 FDG PET/CT In A Patient With Lung Mass. Molecular Oncologic Imaging, 1(1), 18-19

Keywords
Vasculitis
FDG PET/CT

Research Article
Received:16.09.2021
Accepted: 16.10.2021
Published: 22.10.2021

ABSTRACT

Seventy-seven years old male patient with diagnosis of mass like lesion at the apex of the left lung lobe was subjected to the F-18 FDG PET/CT for diagnostic purposes. The imaging results showed hypermetabolic mass lesion and additional nodule in the left lung and incidentally found generalized arteritis involving aorta, common iliac and left femoral branches.

1. Figure 1

77 years old male patient presented with left lung apical mass was referred for metabolic characterization as well as staging of the primary tumor. PET/CT images of the patient revealed hypermetabolic (SUVmax=14.8) lesion with diameter of 17x33 mm in the apex of the left lung lobe (Figure 1a) and a nodule 13 mm in length with significant FDG accumulation (SUVmax=16.5) and adjacent infiltration in parenchyma (SUVmax=9.4). Additional to these findings' incidental detection of giant cell arteritis involving the aorta, common iliac and femoral brunches was performed (maximum SUV detected in left main iliac brunch (SUVmax=10.6) (Figure 1c) with equal FDG accumulation in plaques involving thoracic aorta (SUVmax=10.7) (Figure 1b). The patient denied further diagnostic approach thus unfortunately biopsy could not be performed from the mass and vessel wall. F-18 FDG PET/CT has diagnostic facility in the determination of the vasculitis and showing the distribution of the vasculitis. Vasculitis is presented as increased diffuse accumulation of FDG in the involved arterial wall (Figure 1d). Giant cell arteritis was previously determined by FDG PET/CT in case reports. [1, 2] Additionally generalized vasculitis could be determined in several previous case reports.[3, 4] Maffione et al. reported a similar case with FDG findings without aorta and upper extremity involvement.[3] This case shows the most generalized involvement of the arteries determined by FDG PET/CT as far as we know in the literature.

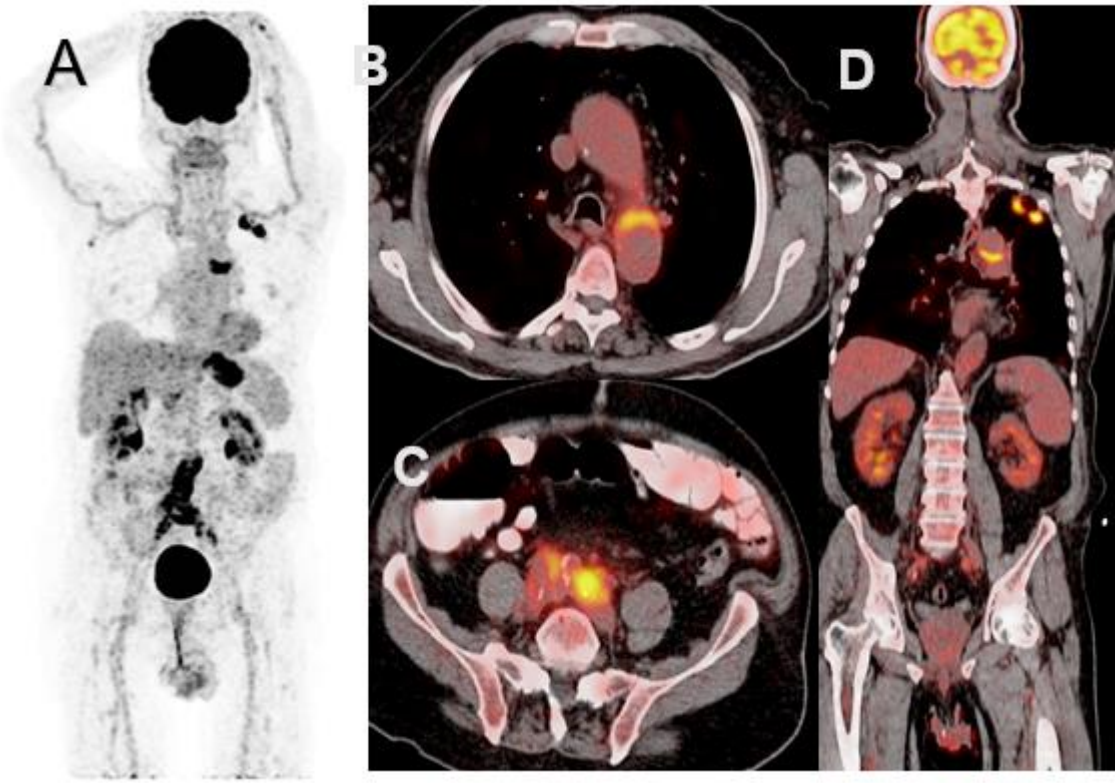

Figure 1.

REFERENCES

Fletcher TM1, Espinola D. Positron emission tomography in the diagnosis of giant cell arteritis. Clin Nucl Med. 2004; 29:617-9. (2)

Förster S, Tato F, Weiss M, Czihal M, Rominger A, Bartenstein P, Hacker M, Hoffmann U. Patterns of extracranial involvement in newly diagnosed giant cell arteritis assessed by physical examination, colour coded duplex sonography and FDG-PET. Vasa. 2011; 40:219-27.(4)

Maffione AM, Rampin L, Grassetto G, Marzola MC, Chondrogiannis S, Rubello D, Colletti PM. 18F-FDG PET/CT of Generalized Arteritis. Clin Nucl Med. 2018; 43:48-49.(3)

Tsai TY, Massasso D, Sharma P, Crozier J Taking PET for a walk - an unusual cause of bilateral leg claudication. .J Rheumatol. 2010; 37:877-9. (1)