

Acute respiratory distress syndrome suggested by ^{18}F -FDG PET/CT

Abstract

A 40 years old woman with a recent diagnosis of vaginal cancer was referred for PET/CT scans to evaluate extent of the disease. PET/CT demonstrated intense hypermetabolic tumoral lesions at the uterus and vagina as well as multiple intraabdominal lymph nodes which was consistent with primary tumor and metastases. There was also hypermetabolic alveolar consolidation and ground glass opacities in the bilateral lung parenchyma other than subpleural regions suggestive of pulmonary edema. After one day, the patient was admitted to intensive care unit with a diagnosis of acute respiratory distress syndrome (ARDS). Despite whole body ^{18}F -FDG PET/CT mainly used for evaluation of malignancies, recognizing of incidental benign disease such as ARDS had a crucial importance. A possible basis for ^{18}F -FDG accumulation at sites of inflammation is that activation of inflammatory cells cause increased density of membrane glucose transporters and hexokinase activity resulting in cellular ^{18}F -FDG uptake. *In conclusion*, diagnosis of ARDS should be born in mind in cases showing diffusely increased lung uptake of ^{18}F -FDG.

Meftune Ozhan¹ MD, Sabire Yilmaz¹ MD, Anar Aliyev¹ MD, Erhan Varoglu² MD, Metin Halac¹ MD, Fatih Kantarci³ MD

1. Department of Nuclear Medicine, Cerrahpasa Medical Faculty, University of Istanbul, Istanbul, Turkey

2. Department of Nuclear Medicine, Faculty of Medicine, Selçuk University, Konya, Turkey

3. Department of Radiology, Cerrahpasa Medical Faculty, University of Istanbul, Istanbul, Turkey

Sabire Yilmaz, MD

Department of Nuclear Medicine, Cerrahpasa Medical Faculty, University of Istanbul Aksaray Istanbul / Turkey

E-mail: yilmaz_sabire@yahoo.com, Phone: +90 0212 4143275

Hell J Nucl Med 2012; 15(1): 72-73 Abstracted on line: 9 March 2012