

Tytuł pracy: 18F-FDG-PET/CT findings in ectopic ACTH-dependent Cushing's syndrome – case report

Autor: Monika Mierzejewska

Afiliacja: Department of Nuclear Medicine, Medical University of Gdańsk, Poland

Adres email: m.mierzejewska@gumed.edu.pl

Współautor, Afiliacja, adres email: Grzegorz Romanowicz Department of Nuclear Medicine, Medical University of Gdańsk, Poland grzegorz.romanowicz@gumed.edu.pl

Wojciech Cytawa Department of Nuclear Medicine, Medical University of Gdańsk, Poland

wojciech.cytawa@gumed.edu.pl

Autor prezentujący: Monika Mierzejewska

Telefon kontaktowy: 698568278

Afiliacja: Here we present a case of a 65-year-old male admitted to endocrinology department with clinical symptoms of Cushing's syndrome. Laboratory tests revealed high serum levels of cortisol and ACTH. Magnetic resonance imaging of the pituitary gland was normal. Hence, the patient was diagnosed with ectopic ACTH-dependent Cushing's syndrome. Thorax computed tomography (CT) scan and 18F-FDG-PET/CT (FDG-PET) showed a metabolically active tumor with central necrosis, measuring 80x62mm, SUVmax 10.5, in the upper lobe of the left lung, highly suspicious of primary neoplasm, requiring differentiation with an inflammatory process. Additionally, FDG-PET demonstrated symmetrically, non-focally enlarged and metabolically active adrenal glands (SUVmax up to 15.5), with no other lesions potentially responsible for ectopic ACTH secretion. The patient underwent a biopsy of the left lung lesion, suggesting an exudative inflammation of fungal etiology (aspergillosis). The patient required a continuous pharmacological adrenal suppression and antifungal treatment (voriconazole), however his condition gradually deteriorated. Due to high risk of malignancy the patient was qualified to a left-sided upper lobectomy. The post-operative histopathological examination confirmed aspergillosis infiltration of the lung, surrounding a well-differentiated neuroendocrine tumor (G1), which turned out to be the source of ectopic ACTH secretion. After surgery, the patient's condition slowly improved, the laboratory results, including cortisol and ACTH levels normalized, and the adrenal glands dimensions decreased in the follow-up CT.

Obraz uzupełniający: [Przesłany plik](#)