PET-CT imaging in a patient with progressive supranuclear palsy

Imagens de PET-CT em um paciente com paralisia supranuclear progressiva

Anderson Benine Belezia¹, Victor Hugo Rocha Marussi¹, James Yared³, José Luiz Pedroso², Orlando G. Barsottini², Acary Souza Bulle Oliveira², Lázaro Luiz Faria do Amaral¹

A 67-year-old woman presented with falls, cognitive impairment, mild upgaze palsy and parkinsonism for 3 years. A MRI was unremarkable. A PET-CT with fluorodeoxyglucose (FDG) disclosed reduced metabolism in thalami, midbrain and frontal cortex (Figure 1), suggesting progressive supranuclear palsy (PSP). Posterior MRI showed typical features observed in PSP (Figure 2).

PSP is a neurodegenerative disease which affects brainstem and basal ganglia¹. Early differentiation between PSP and other atypical parkinsonism is a challenge¹. MRI abnormalities in PSP usually appear in advanced stages². In PSP, PET-CT involves upper brainstem, caudate nuclei, insula cortices and frontal cortex³⁴. Functional imaging, such as PET-CT, may be relevant in early differentiation between Parkinson’s disease and atypical parkinsonism⁴.

Figure 1. PET-CT imaging with fluorodeoxyglucose (FDG) of the patient described. Normal metabolism is red, and reduced metabolism is green. The image demonstrates reduced metabolism in medial frontal cortex and anterior portion of the cingulate gyrus (arrows A), and in upper midbrain (arrow B).

¹Hospital Beneficência Portuguesa de São Paulo, Med Imagem, São Paulo SP, Brazil; ²Universidade Federal de São Paulo, Departamento de Neurologia, São Paulo SP, Brazil; ³Hospital do Coração, São Paulo SP, Brazil.

Correspondence: Anderson Benine Belezia; Hospital Beneficência Portuguesa de São Paulo, Med Imagem; Rua Maestro Cardim, 968; 01323-001 São Paulo SP, Brazil; E-mail: abelezia@gmail.com

Conflict of interest: There is no conflict of interest to declare.

Received 15 July 2014; Received in final form 17 December 2014; Accepted 05 January 2015.
Erratum

In the article "PET-CT imaging in a patient with progressive supranuclear palsy" published in the journal Arquivos de Neuro-Psiquiatria, 2015;73(4), in the pages 364 and 365.

The Figure 2 was published in place of Figure 1.
The Figure 1 was published in place of Figure 2.