

PET-CT imaging in a patient with progressive supranuclear palsy

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

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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 cortex^{3,4}. Functional imaging, such as PET-CT, may be relevant in early differentiation between Parkinson's disease and atypical parkinsonism⁴.

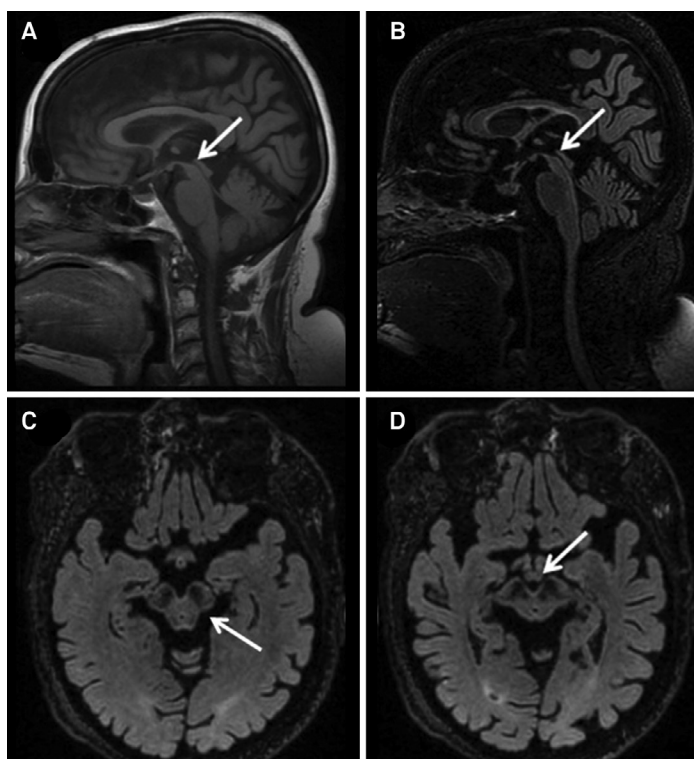


Figure 1. PET-CT imaging with fluorodeoxyglucose (FDG) of the patient described. Normal metabolism is red, and reduced metabolism is green. The image demonstrates reduced metabolism in medial frontal cortex and anterior portion of the cingulate gyrus (arrows A), and in upper midbrain (arrow B).

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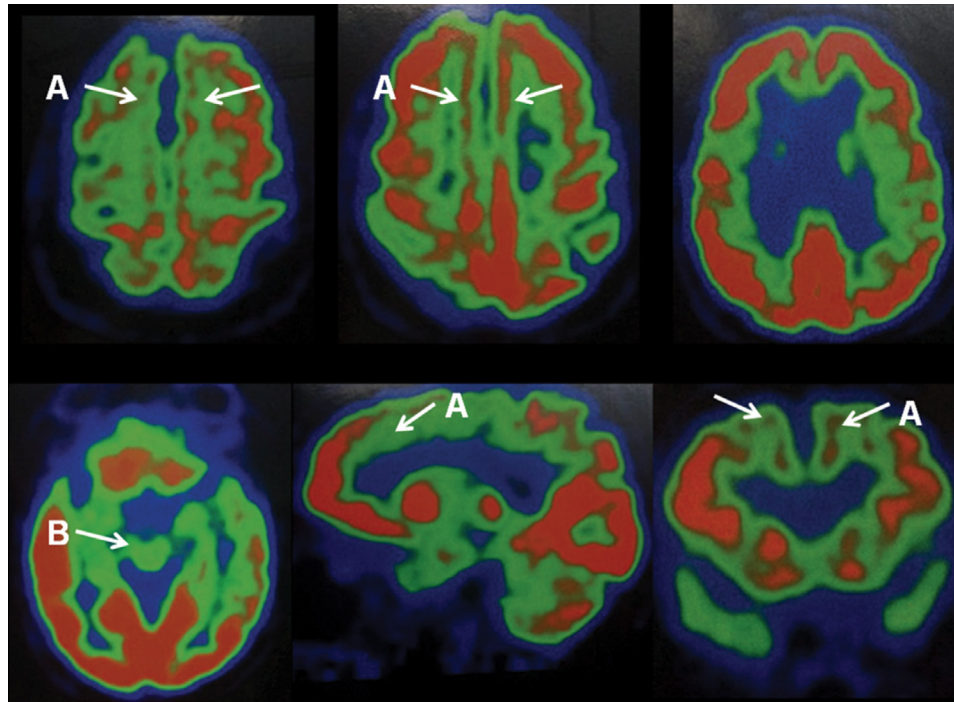


Figure 2. Sagittal T1 (A) and FLAIR-weighted (B) brain MRI show midbrain atrophy with antero-posterior midline diameter reduction and flattening of the superior midbrain (“Penguin” sign) (arrows). Axial FLAIR sequences show concave lateral margin of the tegmentum (“morning glory” sign) (C) and enlarged interpeduncular cistern (D).

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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.