Interesting images

Amyloid Pet imaging with $^{11}$C-PIB in two patients with cognitive impairment

Detección de amiloide en PET/TAC con $^{11}$C-PIB en dos pacientes con deterioro cognitivo

F. Ortega-Nava$^a$,* , I. Martínez-Rodríguez$^a$, M. De Arcocha-Torres$^a$, E. Rodríguez$^b$, I. Mateo$^b$, J.M. Carril$^a$

$^a$ Servicio de Medicina Nuclear, Hospital Universitario Marqués de Valdecilla, Universidad de Cantabria, Santander, Spain
$^b$ Servicio de Neurología, Hospital Universitario Marqués de Valdecilla, Universidad de Cantabria, Santander, Spain

We present two patients, in whom an $N$-methyl-$[^{11}$C$]2$-(4$'$-methylaminophenyl)$-6$-hydroxybenzothiazole ($[^{11}$C$]PIB$) PET/CT was carried out in order to visually evaluate brain $\beta$-amyloid deposition$^1$. The radiotracer was administered as compassionate use and a written informed consent was obtained.

A 58-year-old patient showing mild impairment of verbal fluency, short-term memory and mental calculation on exams was classified as Mild Cognitive Impairment$^2$. On the upper row of the figure, the axial and sagittal slices show absence of $^{11}$C-PIB uptakes in cortical structures.

---

*Corresponding author.
E-mail address: fortega@humv.es (F. Ortega-Nava).

1578-200X /$-$ see front matter © 2011 Elsevier España, S.L. and SEMNIM. All rights reserved.
A 68-year-old patient, non-dependant for daily basic activities, was classified on examination as Alzheimer’s Disease (GDS4) and therefore was on Donezepil treatment. On the lower row of the figure, cortical areas of parietal, temporal, and frontal lobes show an increased uptake of $^{11}$C-PIB (Fig. 1).

In conclusion the outcome of the examination is indicative of the presence of $\beta$-amyloid plaques in the areas previously mentioned, resulting in a positive PIB PET/CT.

References