We conclude that brain perfusion SPECT should be considered during episodes of recurrent hypersomnia in adolescents to rule out a possible associated Kleine-Levin syndrome.

References


D. Ramírez Ocaña *, E. Espinosa Muñoz, C. Puentes Zarzuela

Unidad de Gestión Clínica de Medicina Nuclear, Hospital Regional Universitario Carlos Haya, Málaga, Spain

* Corresponding author.
E-mail address: dramirezoc@gmail.com (D. Ramírez Ocaña).

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Relationship between Virchow–Robin spaces and Alzheimer disease: a case report

Relación de los espacios de Virchow–Robin con la enfermedad de Alzheimer: a propósito de un caso

Dear Editor:

Efforts have been made in recent years to evaluate whether the presence of dilated Virchow–Robin spaces (dVRS) on MRI studies, which had previously been considered incidental, may play a role in such diseases as stroke, multiple sclerosis, cerebral amyloid angiopathy, and Alzheimer disease (AD), and whether dVRS cause any symptoms.

We present the case of a 74-year-old woman with no relevant clinical history, who was assessed due to a 3-year history of progressive cortical cognitive decline with anterograde amnesia, aphasia, agnosia, apraxia, and loss of initiative to perform instrumental activities of daily living, scoring 23/30 on the Mini-Mental State Examination (Folstein, 1975), and presenting mild parkinsonism with reduced arm swing during gait and resting tremor of the right hand. No falls or visual hallucinations were reported.

A blood test ruled out treatable causes, and a brain CT scan revealed subcortical hypodense lesions in both hemispheres (Fig. 1). A brain MRI scan showed dilatation of the Virchow–Robin spaces, together with cortical fronto-temporo-parietal atrophy (Fig. 2). In view of these findings, we ruled out hyperhomocysteinaemia and vasculitis and diagnosed probable AD with parkinsonism of vascular origin.

Virchow–Robin spaces are perivascular, interstitial fluid-filled spaces surrounding cerebral vessels passing from the subarachnoid space through the brain parenchyma; they are considered a drainage route for residual metabolites of parenchymatous activity to the subarachnoid space for removal. They are typically located on the lenticulostriate arteries in basal ganglia (type I), perforating arteries of the corona radiata and semiovial centres (type II), and brainstem (type III).1 They are considered to be dilated when their diameter is equal to or larger than 1 mm. Larger spaces may be detected on CT studies, but MRI provides more

Figure 1 Brain computed tomography scan showing hypodense lesions in the subcortical white matter in both frontal lobes.

In our patient, the presence of dVRS on CT is of interest considering the parkinsonism symptoms attributable to them and their implication in AD pathogenesis.

References


T. Casadellv Codina a,b,∗, F. Espada Olivan a, C. Guerrero Castaño a, N. Ruscallada Morell b
a Servicio de Neurología, Hospital Comarcal Sant Jaume de Calella, Corporació de Salut del Maresme i La Selva, Calella, Barcelona, Spain
b Servicio de Resonancia Magnética Q Diagnóstica, Hospital Comarcal de Blanes, Corporació de Salut del Maresme i La Selva, Blanes, Girona, Spain

∗Corresponding author.
E-mail address: tcasadellv@yahoo.com
(T. Casadellv Codina).

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