Ataxic Hemiparesis — Ventrolateral Nucleus of the Thalamus: Yet Another Site of Lesion

To the Editor:

Thalamic vascular lesions usually produce objective sensory disturbances and sometimes may be associated with aphasia, amnesia, and neglect. Rarely ataxia and choreoathetotic movements can be seen.1,2 I describe a patient with ataxic hemiparesis in whom computed tomography (CT scan) showed an isolated hypodense area in the thalamus compatible with lacunar infarct.

A 60-year-old man, a known hypertensive, suddenly experienced clumsiness of his left arm and leg associated with weakness and heaviness. He was conscious and well-oriented without any memory or other higher function abnormalities; there was minimal left-sided weakness. Tendon reflexes were hyperactive on that side with upgoing plantar. He had difficulty in accomplishing finger-nose and heel-shin tests on the left side with dysdiadochokinesia and intention tremor. Touch and pain sensations were mildly impaired. CT scan showed a small hypodense lesion in the thalamus on the right side (Figure 1). His pyramidal weakness and sensory disturbances improved within 5 days, his ataxia in 10 days.

Garcin3 and Garcin and Lapresele4 described two cases with unilateral cerebellar ataxia in whom infarction of the contralateral thalamus was demonstrated at autopsy. One patient had associated numbness and paresis of the lower limb.4 Cases of thalamic lesion presenting as painful ataxic hemiparesis5 and hypesthetic ataxic hemiparesis6 have been documented. Ataxia is due to the involvement of the dentatorubrothalamic fibers in the ventrolateral nucleus of the thalamus. Hemiparesis is due to extension of the lesion to the adjacent internal capsule.

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References

Leukocyte Rheology in Recent Stroke

To the Editor:

The article by Ernst et al1 throws some light on an important area of hemorheologic research. Leukocyte rheology in vascular disease is now, in fact, a burning question.

In their conclusions, Ernst et al suggest that further studies are needed on the filtration pattern of individual leukocyte subpopulations. Here, at our hemorheologic unit, we have begun studying the filtration of white blood cells and, in particular, of leukocyte subpopulations in stroke patients using a simple separation method2 and a new filtration technique.3 This has been made possible thanks to the collaboration of Prof. Gordon Lowe of the University of Glasgow.

Our results confirm that differences exist in the white blood cell filterability of stroke patients when compared with controls matched for age, sex, and cigarette smoking. These differences seem to be positively correlated with age, but no link has emerged between sex and cigarette smoking.

The separation of the polymorphonuclear and mononuclear leukocyte subpopulations has also demonstrated how only the mononuclear cells are responsible for the alterations observed in filterability. This would seem to confirm the hypothesis that monocytes are responsible for disturbances in the microcirculation. Unfortunately, our results do not permit us to come to any conclusions about the prognostic value of alterations in mononuclear filterability.

These preliminary results and conclusions have led us to draw up a study protocol with the aim of confirming the significance of mononuclear filterability as a marker for vascular disease and as a possible risk factor. We also wish to quantify the exact influence of age on mononuclear filterability to see if it might be considered an index for vascular aging.

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