A case of general paresis showing marked treatment-associated improvement of cerebellar blood flow by quantitative imaging analysis

Masayuki Morikawa,* Jun Kosaka,* Teruhiko Imai,** Hiroyoshi Ohsawa,* Junzo Iida* and Toshifumi Kishimoto*

Departments of *Psychiatry and **Oncoradiology, Nara Medical University

We describe a patient with general paresis who developed progressive dementia and a cerebellar syndrome including wide-based gait, slurred speech, and intention tremor. Quantitative analysis by means of a Patlak plot of single-photon emission computed tomography (SPECT) with ^{99m}Tc-ethyl cysteinate dimer showed generally low blood flow in the cerebrum and the cerebellum. After antisyphilitic therapy, blood flow in the brain, especially in the cerebellum, improved noticeably, as did the cognitive disorder and the cerebellar syndrome.

Key words: general paresis, cerebellar ataxia, cerebellar blood flow, single-photon emission computed tomography (SPECT), blood flow quantitation