

To assess the importance of testing single-photon emission computed tomography (SPECT) of the brain in patients with cognitive disorders, a retrospective data analysis examined patients over four years to compare the clinical diagnosis conclusions SPECT brain. Of 33 patients with clinically probable Alzheimer's disease (AD) had 87% brain SPECT image of AD, half of them were present finding of mixed dementia (MIX). 13 with mild cognitive impairment (MCI) were found heterogeneous patterns of brain perfusion matching mixed population of individuals with MCI and their significance can be evaluated only after a longer interval.

In the next phase we test the hypothesis of hypoperfusion in the cingulate gyrus posterior patients with MCI (4) could be a promising marker for early detection of AD in a heterogeneous group of these patients. We performed measurements of regional perfusion in the posterior cingulate gyrus in the 10 AD patients, 7 patients with MCI and 6 standard. Low perfusion in this field has been demonstrated in patients with AD.

Keywords : 99mTc - HMPAO SPECT brain , dementia , cognitive disorders , Alzheimer's disease