Abnormal Cognitive Aging

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Abstract

As one ages, the brain becomes exposed to the accumulative effects of biological wear and tear. Although the human brain has a considerable potential for plasticity, any breakdown in this plasticity may be key to pathogenesis for Alzheimer’s or neurovascular disease. Five to ten percent of the population aged 65 and older show dementia, as does approximately fifty percent of people over 85. For highly accomplished individuals, the first sign of cognitive deterioration is an increase in the time and effort needed to carry out a task. The diagnosis of dementia is based on: 1) a history of persistent and progressive decline; 2) cognitive scores in one or more tests that fall beyond 2 SD’s from age and education-matched ranges; 3) change in scores that exceed 1 SD within a 6-12 month test/retest period; 4) scores below 36 in the Mini-mental State Exam are considered abnormal; 5) patients should be retesting in 12-18 months. The cognitive rehabilitation of elderly people requires specific programs.