

Autistic spectrum disorder symptoms in a geriatric population with MCI and early dementia

Gregory A. Jicha

University of Kentucky, USA

Autism spectrum disorders (ASD) represent a heterogeneous cluster of clinical phenotypes that may vary in age of onset, but are classically diagnosed by adolescence or early adulthood at latest. The possibility that development of late life ASD may occur after this age has been poorly explored. Several recent studies have suggested that late life onset of ASD symptoms can develop in frontotemporal dementia, but otherwise have not been linked to the development of neurodegenerative disorders such as Alzheimer's disease (AD) or mild cognitive impairment (MCI). In order to more fully characterize the possibility of late life emergence of ASD symptoms in MCI and AD, we surveyed the caregivers of 140 subjects with late-life cognitive impairment from the University of Kentucky Alzheimer's Disease Center Longitudinal Cohort using the GARS-II. Eighty-one caregivers returned the survey for a response rate of 58%. For subjects whose age of onset of cognitive decline was known, autism index ratings based on the sum of the three GARS-II subscale standard scores were associated with age at onset. Subjects with the highest index ratings (Possible/Very likely, $n=14$) reported significantly (statistically and clinically) younger age at onset than those who scored in the 'Unlikely' range ($n=49$): 68.2 ± 9.3 vs. 74.9 ± 7.9 ($p=0.0088$). This remains true when only the dementia cases are considered: 67.7 ± 9.4 (Possible/Very likely, $n=13$) vs. 74.0 ± 8.8 (Unlikely, $n=33$): ($p=0.038$). These data demonstrate that ASD symptoms are seen in conjunction with late-life degenerative dementia of all types and are more prevalent in those with early vs. late onset dementia. It is possible that lifelong subclinical ASD tendencies, might manifest only when neurological function is compromised by the development of even the mildest of pathologic insults in geriatric years. Further work elucidating a potentially complex interplay between ASD and late life dementia could shed much light on our appreciation of preclinical forms of ASD, identify key areas of shared neuroanatomic involvement between ASD and late life dementias, and further provide valuable insights that might hasten the development of therapeutic strategies for both ASD and late life neurodegenerative disorders.

gregory.jicha@email.uky