“Noncognitive” symptoms of early Alzheimer disease

A longitudinal analysis

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Objectives: To observe the natural time course of noncognitive symptoms before the onset of symptomatic Alzheimer disease dementia.

Methods: Using the National Alzheimer's Coordinating Center Uniform Data Set from September 2005 to March 2013, data from cognitively normal individuals who were aged 50 years or older at first visit and had at least one follow-up were analyzed. Survival analyses were used to examine the development of particular symptoms relative to each other on the Neuropsychiatric Inventory Questionnaire (NPI-Q), Functional Activities Questionnaire, and Geriatric Depression Scale, and to compare the development of individual symptoms for persons who did and did not receive a Clinical Dementia Rating (CDR) >0 (indicating abnormal cognition) during the follow-up period.

Results: The order of symptom occurrence on the NPI-Q was similar for participants who remained at CDR 0 and for those who received a CDR >0 over the follow-up period, although the time to most NPI-Q symptoms was faster for participants who received a CDR >0 (p < 0.001). With the exception of memory, Geriatric Depression Scale symptoms reported by both CDR groups were similar.

Conclusions: We found a significantly earlier presence of positive symptoms on the NPI-Q in cognitively normal patients who subsequently developed CDR >0. Among participants with no depression symptoms at baseline, results suggest that depressive symptoms may increase with aging regardless of incipient dementia. Such findings begin to delineate the noncognitive course of Alzheimer disease dementia in the preclinical stages. Future research must further elucidate the correlation between noncognitive changes and distinct dementia subtypes.

Received June 16, 2014.
Accepted in final form October 10, 2014.

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