Does cortical thinning in persons at increased risk for major depression also increase their risk for Alzheimer's disease?

Peterson et al. (1) hypothesized a possible role of right hemisphere thinning in increasing the risk for depressive illness in biological descendants (children or grandchildren) of individuals with recurrent familial major depression (MDD). They also noted that the 28% reduction in cortical thickness that they observed in this population rivaled the magnitude of cortical thinning which has been reported in some neuropsychiatric disorders including Alzheimer's disease (AD).

Thinning of the temporal and parietal cortex has also been observed in individuals with prodromal AD, in asymptomatic amyloid-positive older controls, and has been shown to be a predictor of conversion to dementia (2, 3). Several studies also provide compelling evidence that depression is a well-

established risk factor for AD, irrespective of the age of first depressive episode (4, 5). Peterson et al. might consider the possibility that the cortical thinning and associated poorer cognitive performance, if persistent, in addition to increasing the risk for major depression might also lower the age of onset for the emergence of dementia symptoms associated with AD.

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