'Chicken or the egg'? We need to rethink our understanding of Alzheimer's progression, study suggests

To the non-scientist, the argument of what came first, the chicken or the egg may seem a bit esoteric. Yet in biology, elucidating the timing of cellular events is essential to understanding how normal and abnormal processes arise. For instance, there has been a longstanding belief among neuroscientists, backed by scientific evidence, that beta-amyloid, a protein that can clump together and form sticky plaques in the brain, is the first sign of Alzheimer's disease. The amyloid hypothesis, as it is often referred to, suggests an archetypal cascade in which ?-amyloid in the brain initiates the acceleration of tau pathology, which in turn drives neurodegeneration and associated cognitive symptoms.

However, now a new study from investigators at the VA San Diego Healthcare System is challenging the current hypothesis, with data suggesting that subtle thinking and memory differences may come before, or happen alongside, the development of amyloid plaques.

. . .

"Our study demonstrated a method to successfully detect subtle differences in thinking and memory either before or during the phase when amyloid is accumulating at a faster rate," [researcher Kelsey] Thomas concluded. "This could lead to noninvasive screenings that may be able to detect very early who is at risk of developing Alzheimer's disease."

Read full, original post: The Alzheimer's "Chicken and Egg" Dilemma