

A New Way of Thinking About Alzheimer's Disease May Produce a Long-Awaited Cure

Those of us who follow the current research in Alzheimer's disease are all too accustomed with the problematic amyloid plaques thought to be linked to Alzheimer's. But is it possible that the buildup is, in fact, helpful?

New findings from neuroscientists Rudolph Tanzi and Robert Moir, of Harvard's biggest teaching hospital, Massachusetts General, are disrupting more traditional research. They're suggesting that amyloid-beta is actually a constructive part of our immunity, with the task of protecting the brain from foreign cells; much in the way an oyster develops a pearl, for self-protection. Developing this idea, Moir explains, "Maybe amyloid plaques are a brain pearl, a way for our body to trap and permanently sequester these invading pathogens."

It is a major shift in thinking. Amyloid-beta transitions from being our enemy to becoming a necessary component of our immune system. Overproduction of the plaques impact healthy brain cells and may contribute to the development of Alzheimer's disease.

Although it took multiple years to achieve these remarkable results, the time was invested well. Not only were researchers able to test and demonstrate the virus and bacteria killing ability of amyloids in a highly controlled test tube, but the same results were substantiated when tested in animal models. In fact, mice with encephalitis and meningitis infections were safeguarded against the disease when producing amyloids, while those lacking amyloids perished within a small period of time.

There are several theories yet to be explored to explain what's causing overproduction of the amyloid plaques; the immune system could be attacking healthy cells in the brain, similar to other autoimmune disorders. Another theory suggests that it is a sensitivity to a virus or bacteria resulting in an overreaction. Determining the cause will have amazing outcomes as we will conceivably be able to slow the process in the beginning stages of development and possibly prevent memory loss and cognitive ability.

CareWorks Health Services continues to provide the latest developments in Alzheimer's disease, while caring for those impacted as we await a cure. Whether the need is for short-term respite home care in Orange County or more in-depth care, our team of caregivers is available to provide care whenever you or your loved one needs it.