Mayo Clinic News Network

New definition of Alzheimer's changes how disease is researched

Video	Audio
	When you think of dementia, most people automatically think of Alzheimer's disease too.
	But under a new definition of Alzheimer's, the two terms will no longer be considered interchangeable.
00:03:42 Clifford Jack Jr., M.D. Radiology Research Mayo Clinic	"Alzheimer's disease is one cause of dementia. It's the most common cause, but it's certainly not the only cause. And that has been a source of major confusion."
	Mayo Clinic radiologist and Alzheimer's researcher Dr. Clifford Jack helped lead a team of scientists with the Alzheimer's Association and the National Institute on Aging releasing a new framework for Alzheimer's research.
	Currently, Alzheimer's is diagnosed by evaluating symptoms and cognitive behavior associated with the disease.
	But Dr. Jack says that can be misleading for research.
	So, in the new research framework, Alzheimer's disease is not diagnosed based on symptoms.
	Instead, it is diagnosed by its neuropathology, referred to as plaques and tangles.
	This can be done either at autopsy or using biomarkers when a person is still living.
	That means either through cerebral spinal fluid, or through brain imaging.
	The reason this change is significant
00:09:22	"What we're saying is that symptoms are a consequence of the disease. They're not the definition of the disease.

	People can have the pathology in the brain and be symptom free. They still have the disease even though they have no symptoms. If they have the pathology, they have the disease. It's controversial in some circles, right, because historically, the presence of symptoms was the definition. Now we're saying no longer so."
	He says changing the definition allows research to better target patients so clinical trials will be more effective.
	Dr. Jack also says this change is significant because it can allow researchers to diagnose Alzheimer's disease before a patient has symptoms. This will allow scientists to develop treatments that stop Alzheimer's before symptoms develop, improving the quality of life for patients.
	He says a good way to think of the shift is comparing it to how doctors treat heart disease.
00:07:50	"The best way to treat cardiovascular disease is by giving an asymptomatic person statins, you know, for 20, 30 years, as opposed to waiting until that person has a stroke or a heart attack and then trying to treat [that]. So that's the and it's only by defining the disease in this way, biologically, that you can identify treatments that prevent the onset of symptoms."
	Dr. Jack says he and the other scientists releasing the new framework hope it will create a common language for researchers to use in the short term, so
00:09:31	"The long term is that these biomarkers, classifying people in this way, defining Alzheimer's disease in this way, using biomarkers to determine who actually gets into clinical trials, that will lead to more rapid development and identification of treatments. And, so, the long term is that this biomarker-based

definition will lead more rapidly to effective treatments."
For the Mayo Clinic News Network, I'm Ian Roth.