

More Tests Improve Outcome

Alzheimer's Diagnosis

"More Tests Improve Chance of Early Detection."



Two or three tests are better than one, when it comes to predicting the onset of Alzheimer's disease, a new study suggests.

The research shows that using more than one diagnostic test could better predict which people with mild cognitive impairment will go on to develop Alzheimer's disease.

"Misdiagnosis in very early stages of Alzheimer's is a significant problem, as there are more than 100 conditions that can mimic the disease. In people with mild memory complaints, our accuracy is barely better than chance," study researcher P. Murali Doraiswamy, professor of psychiatry and medicine at Duke Medicine, said in a statement.

Include the Eye

Alzheimer's disease typically strikes later in life, that's why researchers are struggling to find a way to spot the signs of its development well before it can affect a patient's golden years.

Eye testing is showing promise. Research on eye testing was presented at the Alzheimer's Association International Conference in Copenhagen, Denmark.

Researchers say the same kind of plaque that clogs the brain, causing Alzheimer's, can also be spotted in the back of the eye.



Fig. 4. Color fundus photograph from an individual with dry AMD. Numerous small and intermediate-sized drusen are visible in the macular region (white).

Trial results show the test can predict the disease 15 to 20 years before any symptoms develop.

Medical experts say each diagnostic technique is important because early detection is a big part of fighting Alzheimer's.

Duke Study: More Diagnostic Tests the Better

A study, conducted by Duke Medicine researchers, included 97 people with mild cognitive impairment. Study participants underwent the typical diagnostic procedures for Alzheimer's that includes cognitive testing, as well as three other diagnostic tests. They included magnetic resonance imaging (MRI), cerebrospinal fluid analysis and fluorine 18



fluorodeoxyglucose positron emission tomography. The study participants were followed for up to four years. The rate of misdiagnosis was highest when the study participants only received the typical cognitive testing -- 41.3 percent. The percentage went down with each additional test, with the lowest percentage of misdiagnosis occurring when all three tests were administered -- 28.4 percent.