

Alzheimer's advances show need for better drugs

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Scientists are reporting advances in detecting and predicting Alzheimer's disease at a conference in Honolulu this week, plus more proof that getting enough exercise and vitamin D may lower your risk.

There are better brain scans to spot [Alzheimer's disease](#). More genes that affect risk. Blood and spinal fluid tests that may help tell who will develop the mind-robbing illness and when.

But what is needed most - a treatment that does more than just ease symptoms - is not at hand.

"We don't have anything that slows or stops the course," said William Thies, the Alzheimer's Association scientific director. "We're really in a silent window right now" with [new drugs](#), he said.

Several promising ones flopped in late-stage tests - most recently, [Pfizer Inc.](#)'s Dimebon. Results on several others won't be ready until next year.

Still, there is some progress against Alzheimer's, a dementia that afflicts more than 5 million Americans and more than 26 million people worldwide. Highlights of the research being reported this week:

-Prevention. Moderate to heavy exercisers had half the risk of developing dementia compared with less active people, researchers from the long-running Framingham Heart Study reported Sunday. Earlier studies also found exercise helps.

"That seems to be as good as anything" for preventing dementia, said Dr. Richard Mayeux, a Columbia University neurologist and conference leader.

Another big government-funded study found that [vitamin D deficiency](#) can raise the risk of mental impairment up to fourfold. This doesn't mean taking supplements is a good idea, doctors warn. A large study is testing whether that is safe and helps prevent a variety of diseases.

-Novel treatments. Tests of an insulin nose spray to improve cognition gave encouraging results, but "it's still a pilot trial" and larger studies are needed to see if this works and is safe, said Laurie Ryan. She oversees Alzheimer's study grants for the National Institute on Aging, which funded the work.

It's based on the theory that Alzheimer's and diabetes are related. Diabetics seem to have a higher risk of developing Alzheimer's, and Alzheimer's patients tend to have insulin resistance, Ryan said. Giving insulin as a nose spray sends it straight to the brain without affecting blood-sugar levels, she explained.

"If it works, it would certainly be an easy thing to administer. It's not like taking a shot each day," and likely would be cheap, she said.

-Improved detection. Many types of imaging can document [dementia](#), which usually is diagnosed through cognition tests. For several years, scientists have used one such method - a radioactive dye and PET scans - to see the sticky brain plaque that is a key feature of Alzheimer's. But the dye is tough to use, and at least four companies are developing better ones.

Philadelphia-based Avid Radiopharmaceuticals Inc. reports success with one such dye, and says it may offer an early warning for those on their

way to developing Alzheimer's. The claim has led to some media buzz.

"I don't want to downgrade - it's a significant accomplishment," Thies said, but it mostly improves on the existing test.

A PET scan costs \$3,000 to \$5,000 plus whatever Avid would charge for the dye, if it wins federal approval. It may require special training to give the test and interpret it, so it likely will remain mostly a research tool to pick the right patients for clinical trials and monitor a drug's effects, Thies said.

Mayeux, the Alzheimer's conference leader, agreed.

"It's not going to be helpful in diagnosis," because a lot of people without Alzheimer's have plaque that can be seen on scans, he said. These people may go on to develop Alzheimer's someday, but more study would have to establish that for it to become a definitive diagnostic test, rather than a tool to monitor plaque levels in research, he said.

Until there are better treatments, there will be little demand for tests that show you have or are destined to get the disease, several experts said. There's little testing now for the first gene strongly tied to Alzheimer's risk, ApoE-4.

"It's kind of like finding high cholesterol" but not having drugs that can lower it, said Dr. Mark Sager, director of the Wisconsin Alzheimer's Institute at the University of Wisconsin-Madison. He was involved in a study of a different Alzheimer's-linked gene that will be reported this week.

Scientists also don't know if the plaque is a cause, an effect, or just a sign of Alzheimer's. Two experimental drugs seemed to clear plaque but did not lead to clinical improvement.

"We've still got a long way to go," Sager said.

More information:

National Institute on Aging: www.nia.nih.gov

Alzheimer's Association: www.alz.org

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