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Testing for Alzheimer's disease

When you need a brain scan—and when you don't

It is normal to forget things as you age. But many older people worry that they are getting Alzheimer's disease when they can't remember things.

A new imaging agent, used with a PET scan of the brain, can help diagnose Alzheimer's. But before getting this scan you should have a full medical exam. If your exam shows serious memory loss and your doctor can't find a cause for it, then you should have the scan. Otherwise, the results can be misleading and you should not get the scan. Here's why:

The scan does not prove that you have Alzheimer's.

Alzheimer's can be found in the brain because it involves abnormal cell clumps. These clumps are called plaques. A PET scan—which is an imaging test—can show these plaques, using a radioactive imaging agent. During the test, the imaging agent is injected into your body, where it attaches to the plaques. Then pictures are taken of your brain. The imaging agent highlights the plaques so they can be seen on the scan.

If the scan does not show any plaques in your brain, then it is much less likely that you have Alzheimer's. However, you can have plaques in your brain but not have Alzheimer's. And having plaques does not mean that you will get Alzheimer's in the future.



Alzheimer's is not the only cause of forgetting things.

Alzheimer's disease is the leading cause of memory loss and thinking problems among older people. But other medical conditions, such as strokes, thyroid problems, drug interactions, alcoholism, and vitamin deficiencies, can cause the same symptoms. Unlike Alzheimer's, these may be treatable.

Medicines can also cause memory loss and thinking problems. So if you have symptoms, it is important to find out what the cause is.

Finding the cause starts with a medical evaluation.

A doctor who works with older people and is an expert in diagnosing and treating dementia should examine you. The doctor will take a medical history and do a physical exam and other tests to see how well you can remember things and solve problems. You may also need blood tests to look for other conditions that can cause memory loss.

The doctor will ask about all the medicines you take, including over-the-counter drugs and dietary supplements. Some can affect your memory and thinking. You may also have other imaging tests, like an MRI or CT scan to rule out other things that can cause Alzheimer's-like symptoms, such as a stroke or a blow to the head.

If your exam and tests show that you have memory loss and your doctor still can't find the cause, then a PET scan may help diagnose your condition.

The new scan can pose risks.

If the PET scan is done before you have a complete medical evaluation and it shows plaques in the brain, it can cause unneeded anxiety. It can also lead to a wrong diagnosis. Your doctor may assume you have Alzheimer's and not look for other causes that might be treatable.

The scan exposes you to a small amount of radiation. And it is sometimes combined with a CT scan, which increases the amount of radiation exposure. The harmful effects of radiation can add up over time, so it's best to avoid radiation when you can.

It can be expensive.

A PET scan of the brain can cost several thousand dollars. Medicare and private health plans do not pay for it now, though that may change one day.

When should you have the scan?

If you have had a complete medical evaluation without finding a cause for your memory loss, a PET scan may be the next step. When all other causes have been ruled out, seeing plaques in the brain can help your doctor diagnose Alzheimer's.

Learning that you have early-stage Alzheimer's could help you plan for the future. And there are drugs that you may want to try. However, most drugs will not relieve symptoms or slow the disease.

Advice from Consumer Reports

Keeping your memory sharp

Control risk factors. Have your cholesterol, blood pressure, and blood sugar levels tested. High levels can damage arteries and block blood flow to the brain. If your risks are high, talk to your doctor about changing the way you eat and take medicines.

Exercise regularly. Regular exercise may help new brain cells grow. It can also help control high cholesterol, high blood pressure, and diabetes. Try moderate exercise, such as walking or biking, for 30 minutes a day, five days a week.

Stay connected. Being with people may help keep your brain healthy. Visit with friends or family, volunteer, or attend religious services.

Challenge your mind. A healthy brain is a working brain. Try activities that challenge your brain—like book clubs, theater, lectures, board games, learning a language or dance steps, or playing a musical instrument.



Get enough sleep. Sleep helps you think clearly, react quickly, and remember things. Try to get 7 to 8 hours of sleep each night. You sleep better if you go to bed and wake up at the same time each day. Limit naps and avoid alcohol and caffeine after dinner.

This report is for you to use when talking with your healthcare provider. It is not a substitute for medical advice and treatment. Use of this report is at your own risk.

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