

Information Sheet: Amyloid imaging for older adults with Mild Cognitive Impairment (MCI)

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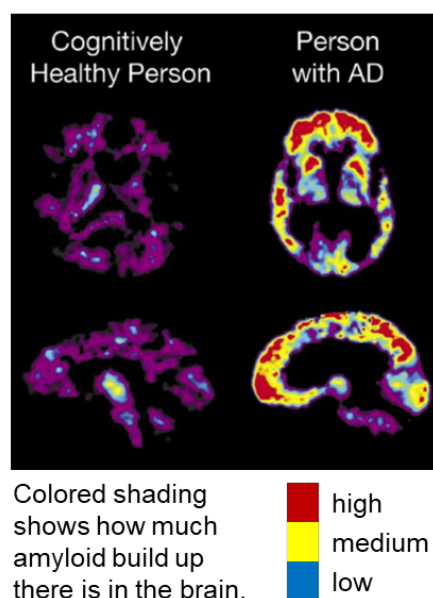
Learning your PiB Scan Amyloid Imaging Results:

- The PiB PET scan is being done as part of a research study using an experimental radiotracer. These results will not automatically appear in your medical record.
- Your results will be available approximately 2 months after having the PET scan.
- You may bring whomever you would like to the meeting where results will be discussed.
- The following information provides a general overview of amyloid imaging.
- Information specific to you will be discussed during the Results Disclosure session.

About Amyloid PET imaging

- We use something called positron emission tomography, or PET, for short. PET scans allow doctors to see activity in a person's brain. The PET scan that you had uses a substance called Pittsburgh Compound-B (PiB) which is given through a shot in the arm at the time of the scan.
- PiB sticks to a protein in the brain called amyloid-beta ($A\beta$), or amyloid for short. Amyloid is often found in the brains of patients who have Alzheimer's disease (AD), but is sometimes present in the brains of older adults who do not have Alzheimer's.
- Many scientists believe that amyloid builds up over many years before any symptoms of memory loss begin. Up until recently, amyloid could only be seen by doing an autopsy after the patient died. By using a PiB scan, we can tell now whether or not you have amyloid build up in your brain during life.

Example of amyloid brain scan



There are two possible results from amyloid imaging for older adults with Mild Cognitive Impairment (MCI):

1. A significant level of amyloid build-up

- Having amyloid build up on a PiB scan would mean that these individuals are at a higher risk for eventually developing Alzheimer's as compared to someone who is noticing changes in their memory but does not have amyloid build up in their brain. Put another way, this finding suggests that Alzheimer's may be part of the underlying cause of the changes in memory or thinking that you have been noticing.
- From a research point of view, this means that it may be a good idea for you to have cognitive testing once a year to check for possible changes over time.
- Individuals who have a diagnosis of MCI may be appropriate for treatment with a recently approved medication if testing has confirmed that they have amyloid build up in the brain. Because PiB-PET is a research scan, it is possible that a person with such build up may be asked to undergo other testing in a traditional (non-research) medical setting to confirm eligibility for treatment.

Limitations of this information:

We are still learning about other factors, both genetic and environmental, that determine risk for Alzheimer's. It's important to note that there is no one, single definitive test for Alzheimer's. Alzheimer's is diagnosed based on results from a combination of tests including, for example, a physical exam, a review of a person's medical history and medication list, cognitive testing, as well as laboratory tests and brain scans.

2. No significant amyloid build-up

- This finding would suggest that Alzheimer's may not be the underlying cause of the changes in memory or thinking that you are experiencing.

Limitations of this information:

Keep in mind that there are other causes of memory decline and changes in thinking besides Alzheimer's (for example, stroke and Parkinson's disease). PiB scans do not give us information about these non-Alzheimer's types of dementia.

Things to consider when deciding whether to get your amyloid imaging results:

- Think about how you might feel if you were to learn that you had significant amyloid build up. For example, some people find satisfaction in gaining more information about what is happening in their brain while others may experience worry or upset.
- Think about how you might feel if you were to learn that you did not have significant amyloid build up. For example, some people are relieved to hear this news, while others may find it frustrating that the test did not explain their symptoms.
- Think about how you might use the information to plan ahead or plan for the future.
- Because the PET scan that you had was part of a research study, the results would not automatically appear in your medical record.

