

Information Sheet: Amyloid imaging for older adults who are not experiencing cognitive changes

Contact:

Betty Biomarker, PhD
Associate Professor, Department of Psychiatry
University of Pittsburgh School of Medicine
1000 Amyloid Avenue
Pittsburgh, PA 15213
Telephone: (412) 555-5555
Email: BBiomarker@university.edu

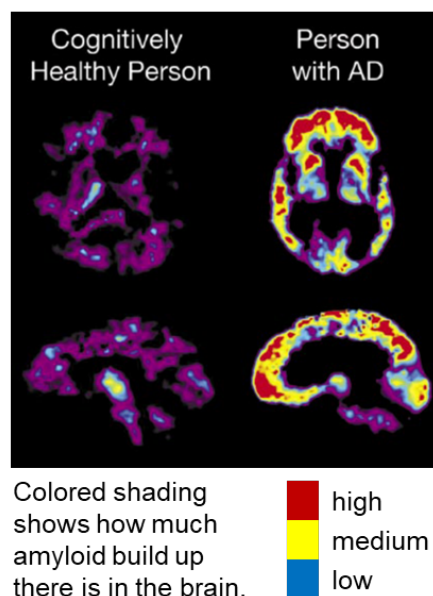
Learning your PiB Scan Amyloid Imaging Results:

- 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 who are not experiencing cognitive changes:

1. A significant level of amyloid build-up

- Approximately 30% of older adults who are not experiencing cognitive changes are found to have amyloid build up in their brain.
- The clinical meaning of this finding is not yet clear. Having amyloid build up in the brain may mean that these individuals are at a higher risk for eventually developing Alzheimer's than someone who does not have amyloid build up in their brain.
- From a research view, you would be encouraged to continue to have yearly cognitive testing at the ADRC to check for any changes in your memory or thinking over time.

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 aren't very many long-term follow-up studies of people with normal cognition who have amyloid build-up in their brains.

2. No significant amyloid build-up

- This means that these individuals would likely have a lower chance of developing symptoms of Alzheimer's within the next few years as compared to someone who does have amyloid build-up in their brain.

Limitations of this information:

It is not possible for researchers to predict with certainty whether you will ever develop Alzheimer's in your lifetime. We are still learning about other factors, both genetic and environmental, that determine risk for Alzheimer's.

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.
- Think about how you might feel if you were to learn that you did not have significant amyloid build up.
- 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, these results would be shared with you for your information only. These results would not appear in your medical record and should not be the basis for medical decision-making.

