
EXAMINATION: BRAIN AMYLOID PET/CT IMAGING STUDY

CLINICAL INDICATIONS: Mild cognitive impairment. Assess for amyloid plaque burden and patient's eligibility for anti-amyloid therapy.

COMPARISON STUDY: Report of MRI Brain WO contrast March 14, 2025 has been reviewed.

RADIOPHARMACEUTICAL: 10.4 mCi F-18 Amyvid (Florbetapir F-18 Injection) IV.

PROCEDURE: The patient was positioned in the Biography mCT (Ultra High-Definition LSO PET/40 slice CT) scanner 48 minutes after injection. A noncontrast CT scan of the brain was obtained for attenuation correction, then a 10-minute emission scan of the brain was acquired. Images were corrected for signal attenuation and reviewed in transaxial, coronal and sagittal planes.

FINDINGS: Imaging shows moderate tracer activity only in the white matter which is within normal limits. There is good contrast between the grey and white matter in all sections of the brain.

The concurrent CT imaging shows mild generalized cortical atrophy.

The PET imaging data is analyzed using MIM Neuro Software, with SUVR (Standardized Uptake Value ratio) listed as following:

Brain Structure	SUVr *	Normal Values/Mean (Range)
Anterior Cingulate Gyrus	0.86	0.99 (0.84 - 1.14)
Inferior Medial Frontal Gyrus	0.81	0.91 (0.81 - 1.01)
Lateral Temporal Lobe	0.98	0.99 (0.88 - 1.11)
Posterior Cingulate Gyrus	0.92	0.94 (0.82 - 1.05)
Precuneus	1.05	1.00 (0.91 - 1.10)
Superior Parietal Lobule	0.96	0.97 (0.86 - 1.09)
Occipital Lobe	0.96	1.09 (0.89 - 1.21)
Average	0.93	0.97 (0.89 - 1.04)

* Reference Structure: Cerebellum

The PET data is reanalyzed using MIM Neuro Software, revealing a **Centiloid value of -13.25**.

IMPRESSION:

Negative Amyloid brain scan, with quantitative SUVR and Centiloid value listed above.