

## **EXAM: PET IMAGING FOR ALZHEIMER'S DEMENTIA**

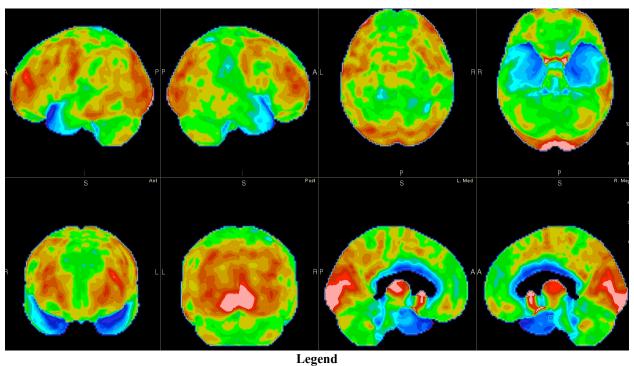
**HISTORY:** 69-year-old lady presents with aggressive short-term memory loss. MMSE score 27/30 in low normal range, borderline mild cognitive impairment. Brain MRI 03/30/2007 was negative.

## **FINDINGS**

There is markedly reduced metabolic activity in hippocampus, parahippocampal gyrus, amygdala and posterior cingulate gyrus bilaterally exceeding 2 Z-scores in metabolic depression compared with normal. Metabolic activity is otherwise normal throughout remainder of cortex.

Metabolic activity is otherwise normal throughout remainder of cortex, specifically including frontal and occipital lobes. There is no evidence of frontotemporal dementia or dementia with Lewy bodies. Subtentorial cerebellar metabolic activity is normal.

Noncontrast CT for fusion demonstrates mild atrophy with mild lateral and 3<sup>rd</sup> ventricular prominence and proportionate cortical sulcal prominence, predominantly in temporal lobe with prominent Sylvian fissures. There is no evidence of recent or remote lacunar infarct, mass or abnormal extraaxial fluid collection.



Red/Yellow: These areas equal or exceed upper normal range of cortical metabolic activity. Blue/Black: These areas are greater than two Z-scores below normal in metabolic activity.

## **CONCLUSION:**

- 1. Selective cerebral bihemispheric metabolic deficits in pattern characteristic of Alzheimer's disease, pre-dementia phase in view of clinical presentation.
- Mild cerebral atrophy on CT brain in pattern also consistent with (but not diagnostic of) Alzheimer's disease.
- 3. No evidence of frontotemporal dementia or dementia with Lewy bodies.

Contact Specialty Teleradiology at 888.671.1076 with any questions or comments about this report