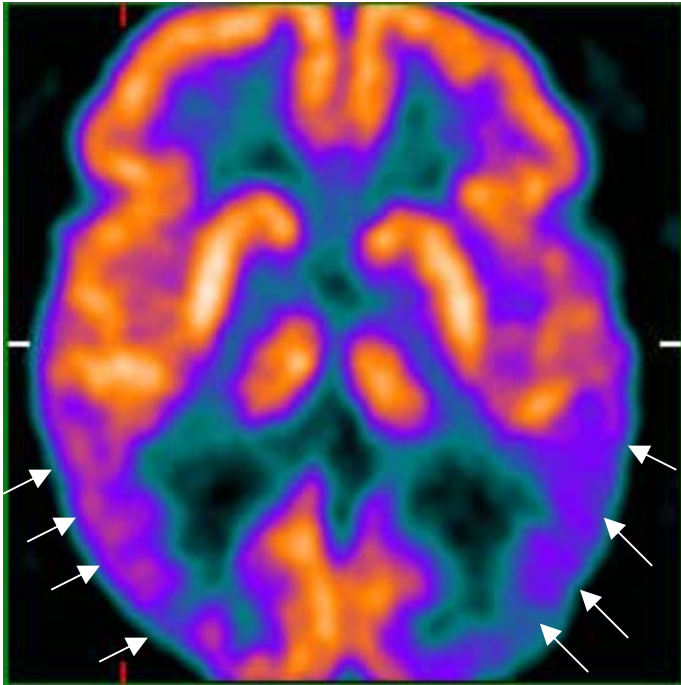
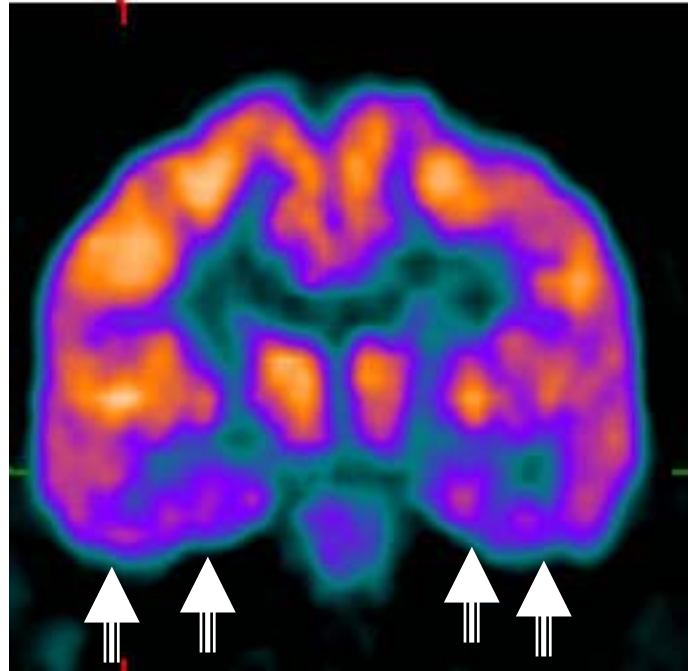


P.E.T. CASE OF THE MONTH

Gabriel Soudry, M.D. Franklin Square Hospital Center December 2003



PET transverse section through basal ganglia and thalami



PET coronal section through thalami

This 56 year old man was referred to a neurologist for confusion, memory loss and getting lost while traveling. His clinical evaluation and neuropsychological testing was suggestive of **dementia of the Alzheimer's type**. A brain MRI only showed mild non-specific generalized volume loss. A PET scan was obtained which showed bilaterally decreased FDG uptake in the parietal (small arrows) and temporal regions (large arrows).

How did the PET help: The PET confirmed the clinical impression of Alzheimer's disease by showing a pattern of FDG uptake classic for Alzheimer's disease.

In a recent study involving 284 patients undergoing evaluation for dementia, PET detected progressive dementia with a sensitivity of 93% and a specificity of 76% (1). The initial pattern of cerebral metabolism was significantly associated with the subsequent course of progression overall and a negative PET scan indicated that pathologic progression of cognitive impairment during the mean 3-year follow-up was unlikely to occur.

(1) JAMA 2001;286:2120-2127

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This case and previous ones can be seen at
www.petcases.com