

APPENDIX to Sheehan W, Thurber S. Review of Two Years of Experiences with SPECT Among Psychiatric Patients in a Rural Hospital Setting. *J Psychiatr Pract* 2008;14:318–23

Sample of findings from 10 patients who were evaluated using SPECT.

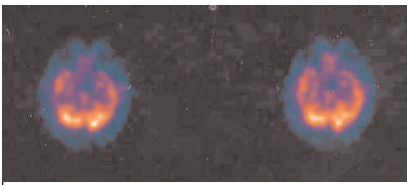


Figure 1. Right temporal lobe perfusion deficit in a 31-year-old Caucasian male with a history of Asperger’s syndrome; currently exhibiting psychotic symptoms; had a concussion at age 11.

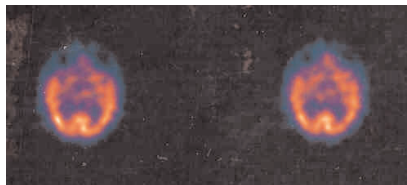


Figure 2a. Right inferior frontal area, small perfusion deficit. The patient is a 39-year-old Caucasian female with a history of panic attacks, agoraphobia, major depression fibromyalgia neuropathy, and vocal cord anomaly (hysterical voice quality).

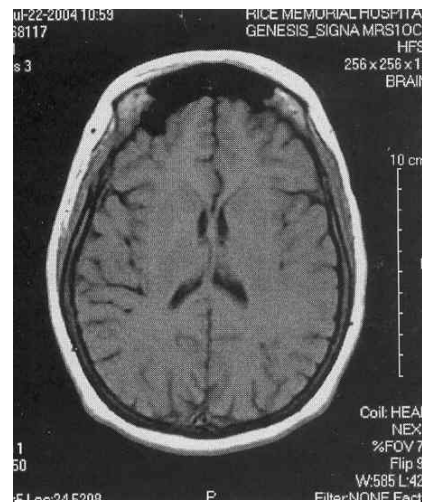


Figure 2b. MRI scan of the above patient showing increased CFS accumulation in the right inferior frontal area.

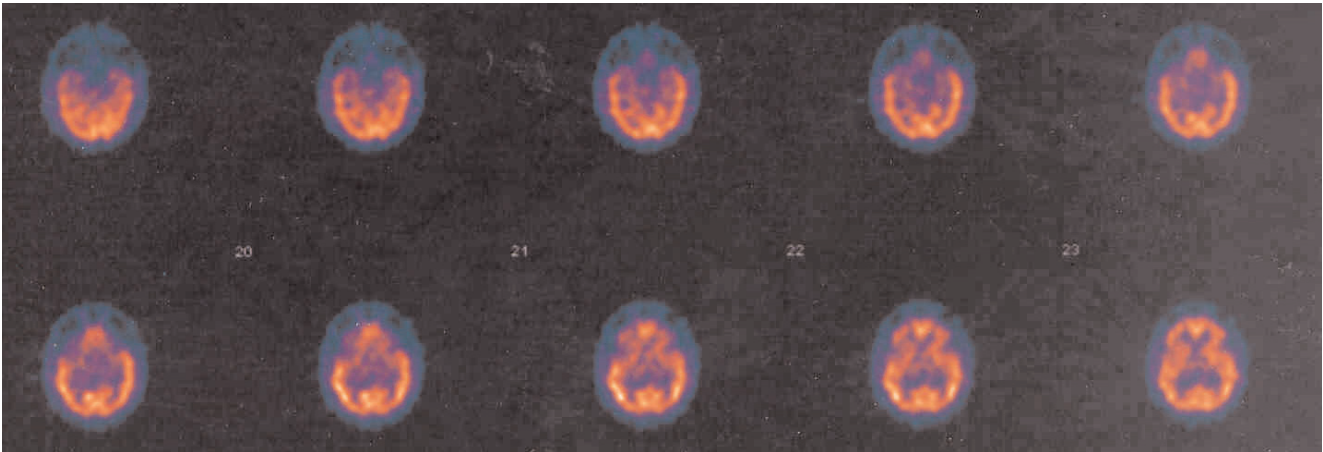


Figure 3. Patchy perfusion deficits in the right frontal-parietal area. The patient is a 56-year-old Caucasian male with a history of unspecified behavioral problems and urea cycle disorder.

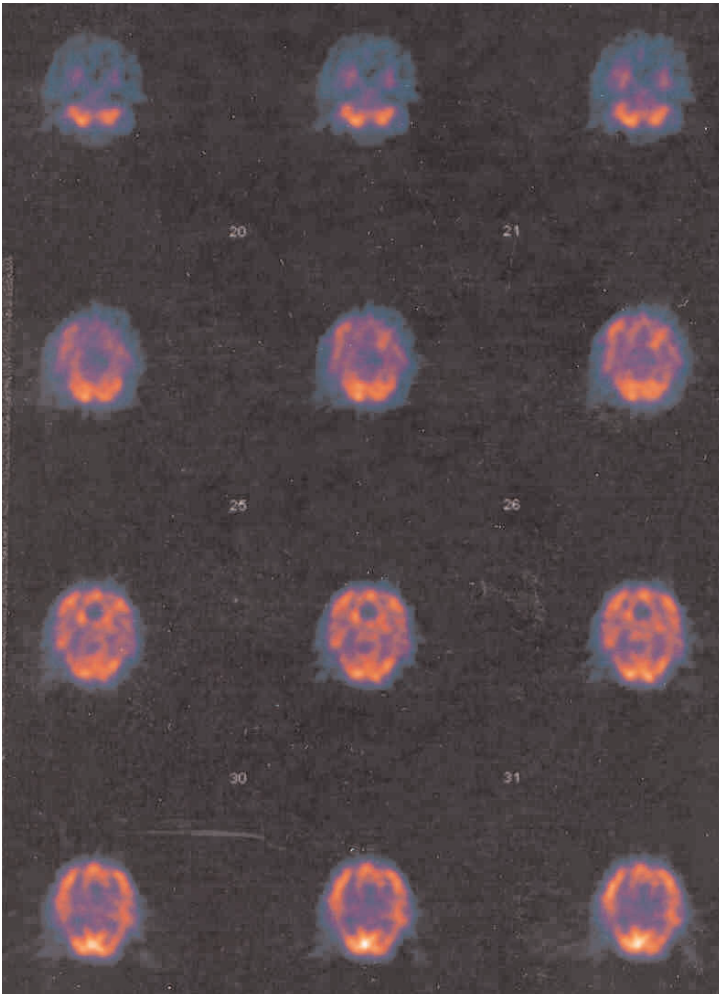


Figure 4. Large contiguous perfusion deficits in the right frontal-parietal area and a large defect in the area of the pituitary fossa. The patient is a 40-year-old Caucasian male with a history of a basilar skull fracture and an extended period of being comatose. He also had hypopituitarism secondary to the head injury. He was hospitalized for paranoid thinking and outbursts of anger.

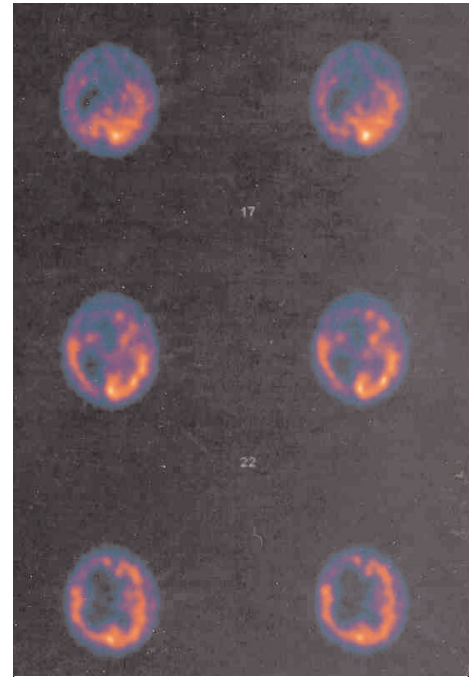


Figure 5a. (Axials) Grossly asymmetric activity between the right and left cerebral hemispheres, including severely diminished activity of the right hemisphere (occipital, temporal, parietal and frontal areas). The patient is a 72-year-old Caucasian male who experienced a right hemisphere subdural hematoma in a motor vehicle accident 50 years earlier. He was referred for medical management of irritable, argumentative behaviors.

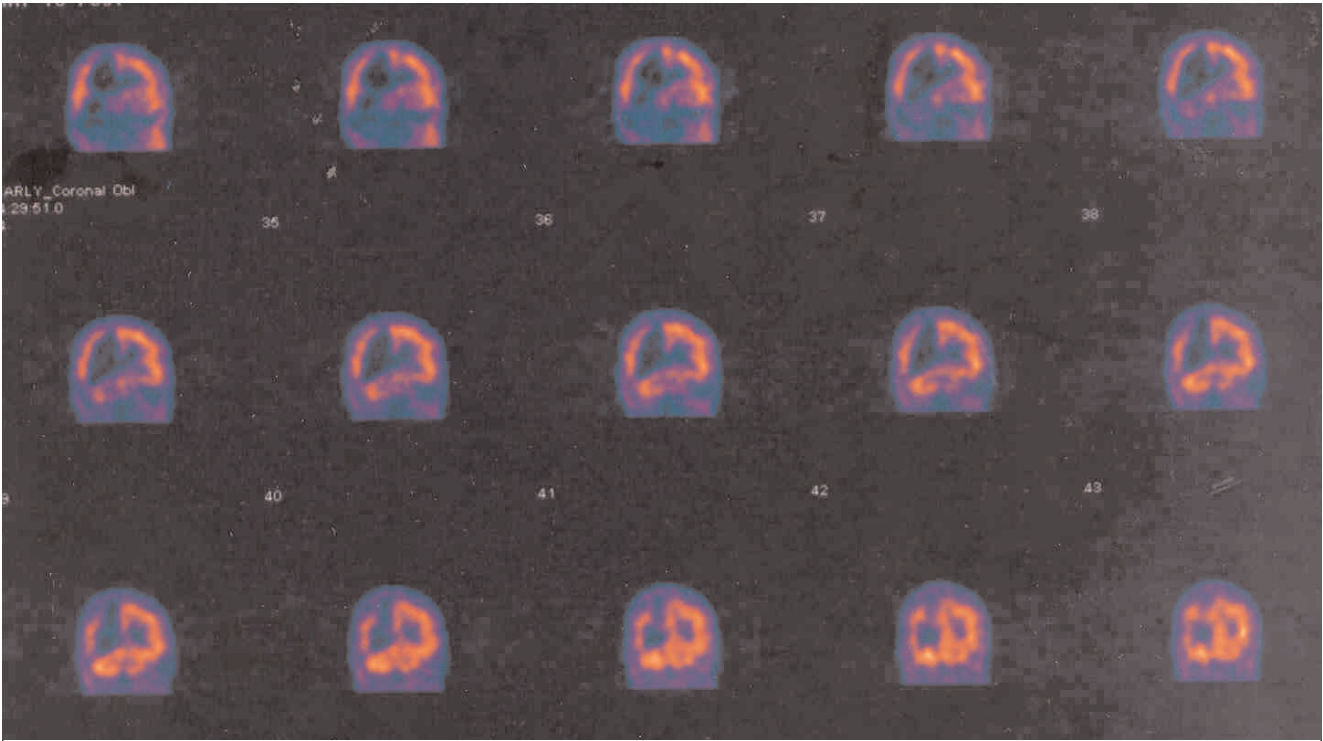


Figure 5b. Coronals of the above.

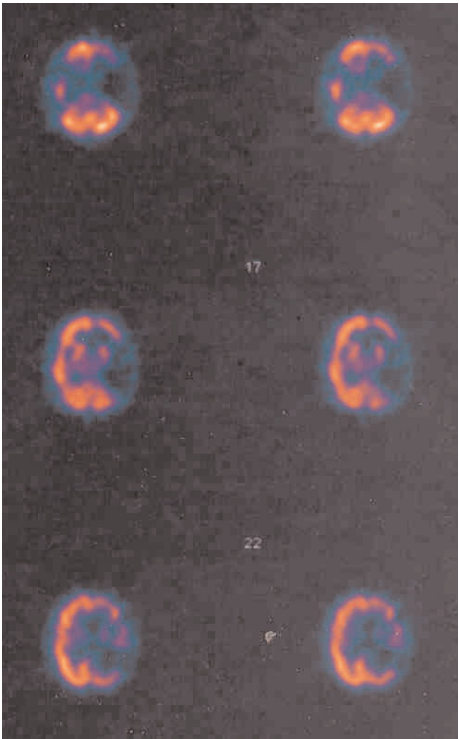


Figure 6. Large areas of diminished or absent activity in the left cerebral hemisphere (e.g., complete absence of activity in the temporal lobe). The patient is a 44-year-old Caucasian female living in a group home because of low cognitive functioning following an attack of herpes encephalitis. Has a history of partial complex seizures. Referred because of irritability and obsessive-compulsive and purging behaviors.

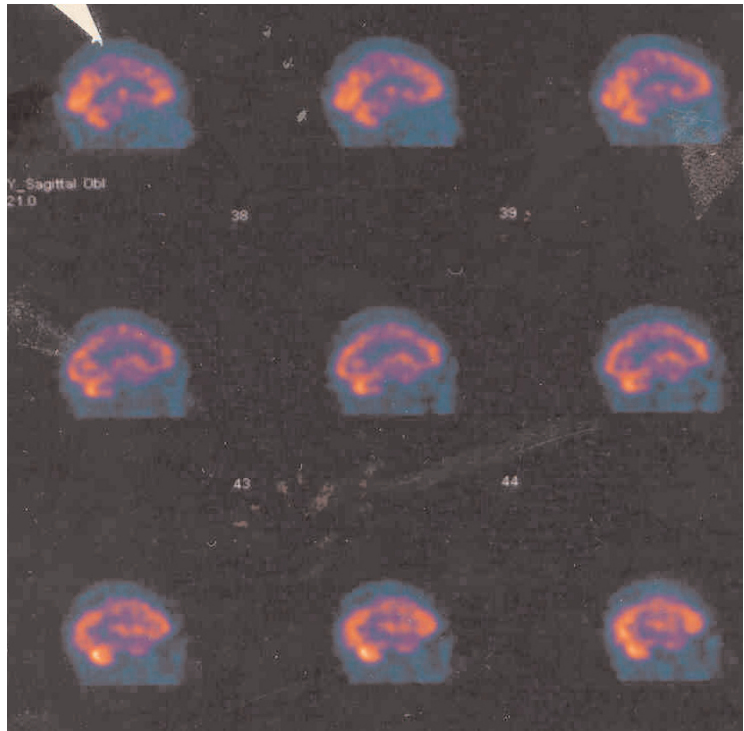


Figure 7. Sagittals show patchy perfusion deficits in the left frontal-parietal area near the vertex. The patient is a 44-year-old Caucasian male with a history of bipolar disorder, disorientation, suicidality, and nocturnal seizures. He had experienced several closed head injuries in boxing and snowmobile accidents.

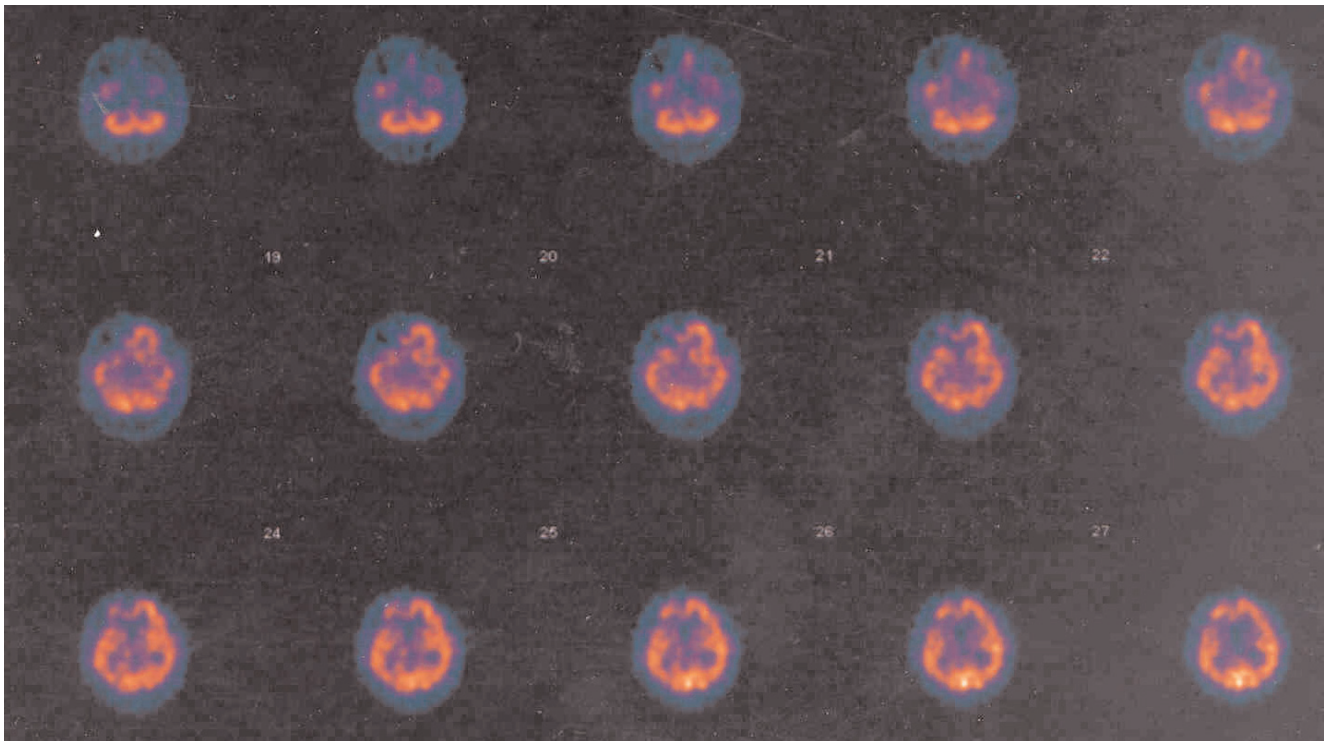


Figure 8. Large perfusion deficit in the right frontal lobe. The patient is a 36-year-old Caucasian male who had experienced a subdural hematoma in a motor vehicle accident at age 20. He had been told he had made a complete recovery from the TBI and now was diagnosed with bipolar disorder; he did not have a therapeutic response to mood stabilizers and atypical antipsychotic medications.

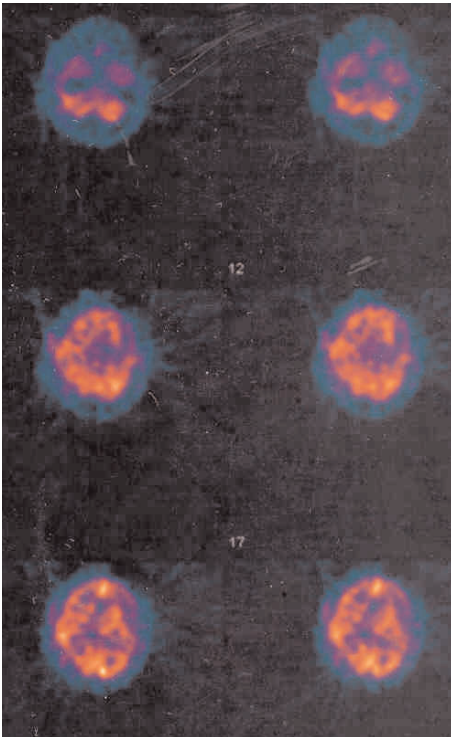
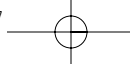


Figure 9. Large perfusion deficit suggestive of a functional disconnection of the left temporal lobe from the rest of the cerebrum. The patient is a 34-year-old Caucasian male who sustained a head injury in an automobile accident that also resulted in a broken back and paraplegia. He developed an iatrogenic addiction to prescription medications for pain and a paranoid delusional disorder that was unresponsive to medication.

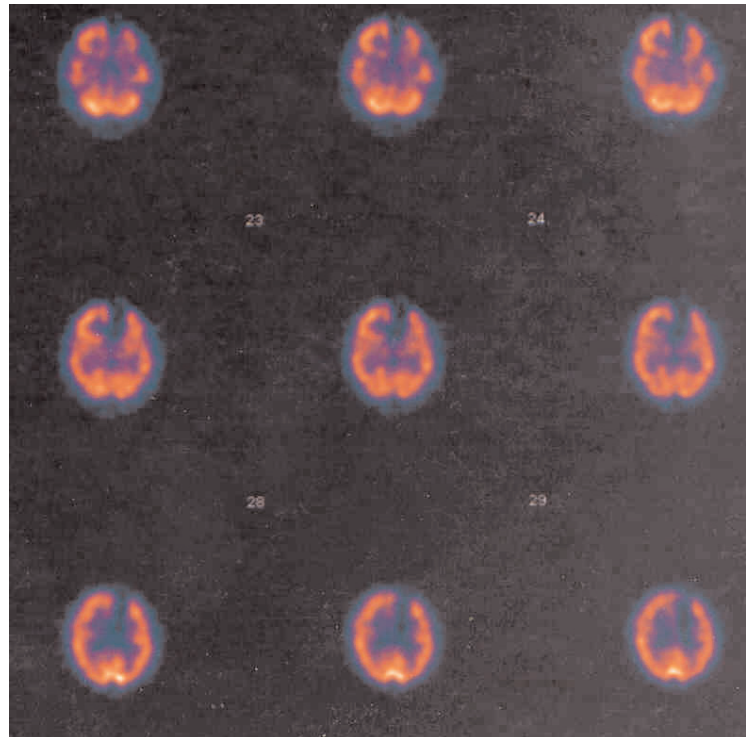


Figure 10. Large perfusion defect in the left medial orbito-frontal cortex. The patient is a 56-year-old Caucasian male with posttraumatic stress disorder related to experiences in Vietnam and a head injury from a motor vehicle accident in the early 1970s; history of moodiness, anger, and work-related accidents that rendered him unemployable.