

NEUROLOGICAL PICTURE

Ictal PET in temporal lobe epilepsy

A 55 year old woman with medically intractable epileptic seizure since the age of 11 years was admitted for presurgical evaluation and intensive monitoring with closed circuit television videotape using surface scalp and sphenoidal electrodes. Physical examination showed a smaller first toe, smaller thumb size, and smaller calf muscle on the left side suggesting possible right cerebral hemiatrophy. Computed tomography, 2-fluorodeoxyglucose PET imaging, and MRI of the brain in the interictal state were normal. Interictal EEG showed frequent medial and lateral anterotemporal discharges bilaterally, more frequent on the right. Video EEG telemetry recording with intracranial subdural strip electrodes, performed in 1986, could not lateralise the origin of seizures because 22 seizures clustered and appeared in succession lateralising to the right medial temporal lobe in 13 attacks and to the left medial temporal lobe in eight seizures. Complex

partial status epilepticus was present at the time of isotope tracer (2-fluoro-2-deoxyglucose) injection and an area of intense hypermetabolism was present over the right medial temporal lobe.

The figure shows two consecutive axial (upper left and right) and sagittal (lower left and right) images of 2-fluoro-2-deoxyglucose cerebral PET, at the level of the right medial temporal lobe. These show an intense hypermetabolism area in the right mesial temporal region.

C Y FONG

*Division of Neurology, University Department of Medicine,
Queen Mary Hospital, Hong Kong, China*

A V DELGADO-ESCUETA

*California Comprehensive Epilepsy Program and
Department of Neurology, UCLA, WLA DVA Medical
Centre, Los Angeles, CA, USA*

Correspondence to: Dr C Y Fong, Division of Neurology,
University Department of Medicine, Queen Mary Hospital,
Pokfulam Road, Hong Kong, China.

