

	Patient 1	Patient 2	Patient 3	Patient 4
Age (at time of surgery)	46	28	38	32
Sex	F	F	F	F
Pre-operative Seizure Frequency	Daily focal aware seizures, 3-4 nocturnal focal impaired awareness seizures per month	1) Focal impaired awareness: "deja vu" seizures 4-6 per month; 2) focal aware "sirens" seizures once every 2-3 months	6-10 focal impaired awareness seizures per day	10-15 focal impaired awareness seizures per day
MRI Findings	Post-surgical changes of left anterior temporal lobectomy with surrounding white matter FLAIR hyperintensity, likely gliosis, residual left hippocampal tail	Unremarkable	Asymmetric L>R bilateral periventricular heterotopia	FCDs identified in 1) right inferior frontal sulcus at border of pre-central sulcus and 2) right temporal pole regions.
Intracranial Monitoring Localization(s)	1) residual left hippocampus (body/tail) 2) left posterior temporal neocortex	1) right mesial temporal with rapid spread to insula 2) right Heschl's gyrus	1) R periventricular nodules 2) L periventricular nodules	1) right frontal FCD, 2) right temporal pole FCD, 3) left temporal pole, 4) left orbito-frontal
Surgeries Performed	LITT of residual left hippocampus + RNS	Right temporal lobectomy + RNS w/ electrodes in right insula and Heschl's area	LITT of bilateral heterotopia + RNS w/ depth electrodes in bilateral hippocampi and left lateral PVH	LITT of two known FCDs in right frontal lobe and right temporal pole + DBS placement
Post-Op Seizure Frequency/Outcome	Free of seizures that impair awareness and has a >50% reduction in auras	"Deja vu" seizures cured with resection; "sirens" seizures occur 2-3 per month	Seizure Free	Seizure Free
Duration of Follow-up	10 months	14 months	11 months	6 months
Adverse Events Related to Surgery	None	Fracture of neurostimulator electrode placed in Wernicke's area requiring replacement. Lead fracture was associated with an increase in non-disabling seizures.	L>R bilateral superior quadrant visual field cuts	None
Adverse Events Related to Neurostimulation	None	Patient able to perceive some stimulations in right Heschl's gyrus as audible beeps.	None	None