

On-line Table 1: Clinical EEG and brain imaging of patients with drug-resistant and drug-sensitive epilepsy

Patient No.	Sex, Age (yr)	Syndrome	Duration of Epilepsy (yr)	Average Seizure Frequency (mo)	Anti-Epileptic Drugs	Video EEG Monitoring	Brain MRI	Ictal SPECT	Interictal SPECT	FDG-PET
Drug-resistant epilepsy										
1	M, 44	TLE	34	1	CBZ, TPM, VPA, PB	Lt. lateral TLE	Cerebro-malacic changes at the right cuneus and left lingual gyrus	NA	NA	Normal
2	F, 52	TLE	42	2	CBZ, VPA, LEV	Lt. lateral TLE	Atrophic change, left temporal lobe	NA	NA	NA
3	F, 29	TLE	5	0.5	LEV, OXC, LMT	Lt. lateral TLE	Normal	NA	NA	Hypometabolism in left temporal lobe
4	M, 43	TLE	37	30	CBZ, VPA, LEV, TPM	Rt. medial TLE	Hippocampal sclerosis, Rt.	NA	NA	Hypometabolism in right temporal lobe
5	F, 29	TLE	12	0.2	LEV, CBZ	Rt. medial TLE	Hippocampal sclerosis, Rt.	NA	NA	Hypometabolism in right temporal lobe
6	F, 26	FLE	15	30	VPA, CBZ, TPM, PB	No localization, suspicious Rt. FLE (considering semiology)	Lesionectomy in the right high parietal cortex	Hyperperfusion in the right posterior-inferior frontal lobe	NA	NA
Drug-sensitive epilepsy										
7	F, 53	TLE	3	0	LEV	Rt. medial TLE	Normal	NA	NA	Hypometabolism in right medial temporal lobe
8	M, 21	TLE	4	0	VPA, ZNS, LEV	Lt. medial TLE	Hippocampal sclerosis	NA	NA	NA
9	M, 18	TLE	4	0	LEV, OXC	Lt. lateral TLE	Normal	NA	NA	NA
10	M, 18	TLE	1	0	LEV	Lt. lateral TLE	Normal	NA	NA	NA
11	M, 18	FLE	1	0	LEV	Lt. FLE	Normal	NA	NA	NA

Note:—FLE indicates frontal lobe epilepsy; LEV, levetiracetam; OXC, oxcarbazepine; VPA, valproic acid; ZNS, zonisamide; CBZ, carbamazepine; TPM, topiramate; PB, phenobarbital; LMT, lamotrigine; NA, not applicable; EEG, electroencephalography; Rt., right; Lt., left.

On-line Table 2: Volume of hippocampal regions in healthy controls and patients with temporal lobe epilepsy

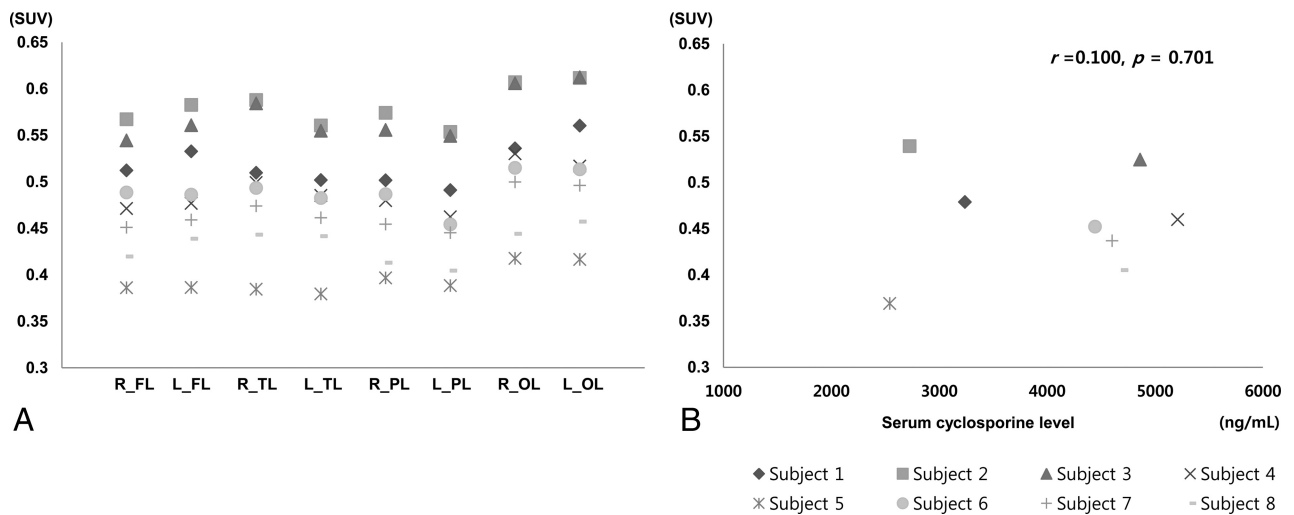
	Lt. Hippocampus (mm ³)	Rt. Hippocampus (mm ³)
Healthy control subjects		
1	13520	10504
2	12928	9664
3	12832	9880
4	13296	10448
5	13160	10440
6	13808	10720
7	12928	9664
8	13848	10616
Patients with temporal lobe epilepsy		
1	11872	9008
2	11896	9120
3	13360	9920
4	12184	9400
5	13408	10464
8	12768	10152
9	13160	10040
10	13656	10896

Note:—Lt. indicates left; Rt., right.

On-line Table 3: Radioactivity in whole-brain (SUV) and ABCB1 genotype

No. of Subjects	Radioactivity in Whole Brain (SUV)	ABCB1 (MDR1)		
		1236 C>T rs1128503	2677 G>T,A rs2032582	3435 C>T rs2032582
Healthy controls				
1	0.47883	CT	GA	CC
2	0.53917	CT	GT	CT
3	0.36889	TT	TT	CT
4	0.45964	CT	AA	CC
5	0.52468	CT	GG	CC
7	0.43680	CT	TA	CT
Drug-resistant epilepsy				
2	0.78392	CT	TA	CT
4	0.62644	CT	GT	CT
6	0.34171	CT	GT	CT
Drug-sensitive epilepsy				
9	0.46978	CT	GG	CC
11	0.41311	TT	GT	CT

Note:—MDR1 indicates Multiple Drug Resistance List of Bad Medications.



ON-LINE FIG 1. A, Radioactivity of the whole brain in healthy participants and regional distributions of radio uptake. B, Relationship between the radioactivity of the whole brain and the serum concentration of CS ($r = 0.100, P = .701$).

On-line Table 4: Comparison of AIs in temporal structures among healthy subjects and patients with drug-sensitive and drug-resistant lateral and medial temporal lobe epilepsy

Variables/Pt. No.	Superior Temporal Gyrus	Middle Temporal Gyrus	Inferior Temporal Gyrus	Hippocampus	Parahippocampus	Amygdala	P Value
Healthy subjects (mean)	3.7592 ± 2.7825	0.4077 ± 3.0872	6.4996 ± 5.9187	10.4621 ± 4.9800	3.0562 ± 4.7347	7.3099 ± 10.5752	
Drug-resistant epilepsy							
Lateral temporal lobe epilepsy							
1	12.02109	6.194027	2.514667	6.6514	2.0533	0.6077	.776
2	26.49111	9.529195	-13.9591	6.1304	1.0569	12.0481	
3	6.689632	6.20482	7.891523	9.3431	5.3695	15.3958	
Medial temporal lobe epilepsy							
4	-2.26316	-2.6759	3.066575	-2.3718	-1.3807	-5.9779	.267
5	2.726637	-3.68332	-8.16219	-6.2177	2.5178	1.2254	
Drug-sensitive epilepsy							
Lateral temporal lobe epilepsy							
9	5.3757	0.9214	5.9762	1.2332	-2.9354	-5.5809	.267
10	5.2332	0.9663	-3.4403	14.6596	5.8813	4.7310	
Medial temporal lobe epilepsy							
8	4.6689	1.2125	1.5589	2.3679	-2.2080	7.7990	

Note:—Pt. indicates patient.