

On-line Table 1: Clinical data of children with MRI-visible FCD and MRI-negative localization-related epilepsy

Case/Age (yr)/Sex	Age at Seizure Onset (yr)	Duration of Epilepsy (yr)	Conventional MR Imaging	Video EEG	MEG Dipole Cluster	Invasive monitoring	Histology	Seizure Outcome Following Surgery (Follow-Up Duration)
1/11.6/F	2	9	R mesial frontal FCD	R frontal	R frontal	R frontal	FCD	Seizure-free (1 yr)
2/15.7/F	4	11	Normal	L frontal	L frontal			
3/16.1/F	3	13	Normal	R peri-rolandic	R peri-rolandic	R peri-rolandic ^a		
4/16.9/M	4	13	Normal	L frontal	L frontal	L frontal	FCD	>50% improvement (2 yr)
5/14.9/M	14	0.9	L rolandic FCD	L peri-rolandic	L peri-rolandic	L peri-rolandic	FCD	>50% improvement (1 yr)
6/14.5/F	0.3	14	Normal	R hemispheric	R parietal and occipital			
7/18.1/F	3	15	Normal	R frontal	R frontal	R frontal	FCD	>50% improvement (2 yr)
8/7.3/F	1	6	Normal	R frontal	R frontal			
9/11.2/M	0.3	10	L temporal FCD	L frontal and temporal	L frontal and temporal	L frontal and temporal	FCD	Seizure-free (1 yr)
10/12.4/M	3	9	L parietal and rolandic FCD	L parietal and peri-rolandic	L parietal and frontal	L parietal and peri-rolandic	FCD	Seizure-free (1 yr)
11/14.0/F	6	8	Normal	R frontal	R frontal	R frontal	Heterotopic neurons in white matter; cortical gliosis	>50% improvement (1 yr)
12/5.9/M	5	0.7	Normal	L frontal	L frontal			
13/9.0/F	1.3	7	Normal	L frontal	L frontal			
14/17.6/M	13	4	Normal	L frontal	L frontal			
15/9.0/F	1	8	Normal	L frontal	L frontal and parietal			
16/18.5/F	15	3	Normal	L frontal	L frontal and parietal			
17/6.5/M	0.7	5	Normal	Bifrontal	L frontal	L frontal	Heterotopic neurons in white matter; cortical gliosis; increased number of oligodendroglial-like cells	>50% improvement (1 yr)
18/9.4/F	4	5	L temporal FCD	L temporal	L temporal	No invasive monitoring, but underwent L anterior temporal lobectomy	FCD	<50% improvement (2 yr)
19/7.3/F	5	2	L frontal FCD	L frontal	L frontal			
20/9.0/F	0.3	8	Normal	L frontal and parietal	L frontal and parietal	L frontal and rolandic ^a		
21/15.1/F	14	1	L temporal FCD	L temporal	L temporal	No invasive monitoring, but underwent L anterior temporal lobectomy	FCD	Seizure-free (1 yr)
22/14.0/F	3	11	Normal	R frontal	R frontal			
23/16.2/F	6	10	R parietal FCD	R parietal and occipital	R parietal and occipital			
24/12.7/M	11	1	Normal	L frontal	L frontal	L frontal and L perisylvian region	FCD	>50% improvement (1 yr)

Note:—R indicates right; L, left.

^aDid not proceed to resection due to involvement of motor cortex.

On-line Table 2: x-, y-, and z-axes of MNI coordinates of FCD, MEG dipole cluster, FA, MD, and λ_1 , λ_2 , and λ_3 in patients with MRI-visible FCD

No.	FCD			MEG Dipole Cluster			FA			MD			λ_1			λ_2			λ_3		
	x	y	z	x	y	z	x	y	z	x	y	z	x	y	z	x	y	z	x	y	z
1	2-13 ^a	-16-15 ^a	43-49 ^a	2-55 ^a	-23-33 ^a	29-53 ^a	-3-31 ^a	21-26 ^a	31-37 ^a	-50-36 ^a	-21-12 ^a	51-58 ^a	-19-17 ^a	-23-7 ^a	25-39 ^a	-58-26 ^a	-25-38 ^a	-6-55 ^a	-41-1 ^a	-27-31 ^a	-12-47 ^a
5	-39-19	-19-11	53-64	-57-20	-35-9	11-64	-32-29	23-24	32-36	-56-1 ^{b,c}	-26-38 ^{b,c}	2-60 ^{b,c}	-22-16 ^a	-21-6 ^b	31-39 ^b	-59-0 ^{b,c}	-65-58 ^{b,c}	-26-60 ^{b,c}	-42-41 ^a	-10-9 ^b	25-26 ^b
9	-67-17	-39-24	-45-3	-67-14	-52-55	-37-32	-35-29	22-25	33-37	N	N	N	-27-20 ^b	-13-10 ^b	26-39 ^b	-43-32 ^b	30-38 ^b	-4-6 ^b	-42-4 ^{b,c}	-27-62 ^{b,c}	-12-34 ^{b,c}
10	-55-3	-71-16	35-68	-62-1	-67-17	3-73	-31-28	20-22	34-37	-57-1 ^{b,c}	-25-64 ^{b,c}	-27-61 ^{b,c}	20 ^a	-13 ^a	39 ^a	-57-5 ^{b,c}	-24-38 ^{b,c}	-24-39 ^{b,c}	-41 ^b	-10 ^b	26 ^b
18	-59-23	-3-21	-37-19	-67-40	-44-3	-25-17	-35-24	-13-30	25-50	-50 ^b	-16 ^b	-18 ^b	19-22 ^a	-15-10 ^a	34-35 ^a	-50 ^b	-14 ^b	-18 ^b	-42	-10-9	25-26
19	-32-21	-16-1	43-53	-58-1	-90-50	-19-69	-46-36 ^{b,c}	-39-28 ^{b,c}	-16-51 ^{b,c}	-50-7 ^{b,c}	-26-32 ^{b,c}	-15-58 ^{b,c}	-33-25 ^b	-32-22 ^b	13-49 ^b	-56-49 ^{b,c}	-66-52 ^b	-48-60 ^b	-43-0 ^a	-25-60 ^b	-14-35 ^b
21	-55-18	-13-20	-43-20	-67-17	-20-1	-34-9	-31	23	36	-29	-17	53	19-21 ^a	-20-10 ^a	35-36 ^a	-48-25 ^b	-21-37 ^b	-19-57 ^b	-39-32	-9-7	20-26
23	4-27	-73-55	21-28	1-43	-86-17	14-43	-40-18	-9-1	40-44	-22-1	19-36	-11-51	17-19 ^b	-18-15 ^b	35-37 ^b	-39	30	-7	-43-34	-15-9	25-51

Note:—N indicates negative.
^a DTI abnormality contralateral to lesion and the MEG dipole cluster.
^b DTI abnormality overlaps with MRI-visible FCD in all 3 x-, y-, and z-axes.
^c DTI abnormality overlaps with the MEG dipole cluster in all 3 x-, y-, and z-axes.

On-line Table 3: x-, y-, and z-axes of MNI coordinates of MEG dipole cluster, FA, MD, and λ_1 , λ_2 , and λ_3 in patients with MRI-negative localization-related epilepsy

No.	MEG Dipole Cluster			FA			MD			λ_1			λ_2			λ_3			
	x	y	z	x	y	z	x	y	z	x	y	z	x	y	z	x	y	z	
2	-63-1	-33-55	-3-76	-35-32 ^a	26-27 ^a	34-36 ^a	-57-36 ^a	-24-14 ^a	-23-57 ^a	19-22	-23-10	-23-10	34-37	57-25 ^a	-24-41 ^a	-23-41 ^a	-43-39 ^a	-9-28 ^a	0-26 ^a
3	1-62	-48-27	10-78	-34-31	21-25	36-37	-39-35	-23-15	50-60	19 ^a	-10 ^a	-10 ^a	35 ^a	-55-1 ^a	-23-59 ^a	-27-61 ^a	-42-38	-10-9	24-25
4	-69-3	-39-53	-36-71	-29 ^a	24 ^a	33 ^a	-53-34 ^a	-24-25 ^a	-23-58 ^a	19-20	-11-10	-11-10	34-35	-44-38	29-37	-4-35	-44-38 ^a	-10-8 ^a	24-25 ^a
6	1-61	-99-24	34-53	-30-24	-8-0	32-47	-49-48	-21-20	-20	-17	-6	-6	33-39	-57-30	-24-38	-22-0	-38-21	-23-8	24-35
7	1-53	-22-68	-12-52	-31	21	32-35	-56-7	-24-27	-38-58	19-23 ^a	-20-10 ^a	-20-10 ^a	34-45 ^a	-48-26	29-38	-4-7	-43-42	-9	23-25
8	23-65	-50-30	-9-44	49-50	-49	45	-34-1	7-43	-26-20	-45-43	17-21	17-21	13	-48-4	-69-62	-39-53	-56-0	-82-33	-12-47
11	-19-66	-15-16	19-62	-31	23	36	-57-36	-24-13	-23-57	-17-16a	-17-7 ^a	-17-7 ^a	31-35 ^a	-43-41	36-37	-6-0	-42	-9	25
12	-49-4	-36-4	30-61	-31-26 ^a	-5-21 ^a	33-46 ^a	-57-0 ^a	-24-39 ^a	0-61 ^a	19-20	-13-10	-13-10	32-39	-57-26 ^a	-23-41 ^a	-8-39 ^a	-42-11	-8-61	24-26
13	-67-1	-40-37	-8-67	-29-28 ^a	-4-21 ^a	36-42 ^a	-57-1 ^a	-24-24 ^a	-19-56 ^a	18-19	-15-10	-15-10	34-35	-43-30	37-39	0-1	-42 ^a	-9 ^a	25 ^a
14	-62-20	-37-2	8-61	-34-26 ^a	-7-25 ^a	31-47 ^a	-57-38 ^a	-24-16 ^a	-21-53 ^a	19-21	-19-13	-19-13	31-39	-57 ^a	-24 ^a	19 ^a	-42 ^a	-9 ^a	25 ^a
15	-64-4	-83-21	-3-64	-29	21	35	-50-0 ^a	-24-39 ^a	-40-66 ^a	-26-16 ^a	-17-7 ^a	-17-7 ^a	25-39 ^a	-29-2 ^a	-18-37 ^a	-27-56 ^a	-41 ^a	-10 ^a	26-47 ^a
16	-68-13	-49-22	25-62	-32-29 ^a	21-24 ^a	32-36	-57-50	-24-20	-23-19	20-22	-20-13	-20-13	34-39	-34	-25	5	-42-39 ^a	-9-7 ^a	24-26 ^a
17	-61-1	-29-45	7-70	-41-23 ^a	-25-29 ^a	20-54 ^a	-57-7 ^a	-24-16 ^a	-19-53 ^a	-69-2 ^a	-49-42 ^a	-49-42 ^a	-34-61 ^a	-24-37 ^a	-24-37 ^a	-45-65 ^a	-44-5 ^a	18-58 ^a	-12-26 ^a
20	-60-1	-71-61	-11-80	-33-20 ^a	1-19 ^a	15-37 ^a	-5-3 ^a	27-32 ^a	12 ^a	-28-13 ^a	-29-18 ^a	-29-18 ^a	27-44 ^a	-44-25 ^a	27-38 ^a	-7-39 ^a	-44-42 ^a	-9-7 ^a	26-27 ^a
22	1-53	-39-45	-16-65	-38-28	21-25	35-37	30 ^a	-20 ^a	59 ^a	28 ^a	-15a	-15a	34 ^a	-48-28	-59-38	-14-6	-42	-9	25
24	-55-18	-54-50	-12-32	-35-29 ^a	22-26 ^a	32-37 ^a	-56-1 ^a	-26-38 ^a	0-58 ^a	-18 ^a	-15 ^a	-15 ^a	-32 ^a	-48-5 ^a	-16-38 ^a	-4-36 ^a	-57	38	27

^a DTI abnormality overlaps the MEG dipole cluster in all 3 x-, y-, and z-axes.