

Appendix 1: Clinical, EEG and radiographic characteristics of the studied patients at onset of PRES

	Age (years)	Sex	Diagnosis	Blood pressure Percentile	GCS	Seizures/ SE	EEG at onset	MRI findings	Radiographic Pattern
1	8.00	Male	ALL	<90th percentile	15.00	Seizures	Normal	Symmetric	Parieto-occipital
2	9.00	Male	ALL	90-95th percentile	14.00	Seizures	Diffuse slowing	Symmetric	Parieto-occipital
3	3.00	Female	NB	90-95th percentile	15.00	Seizures	Diffuse slowing	Symmetric	Holohemispheric watershed pattern
4	6.00	Male	NHL	90-95th percentile	14.00	Seizures	Focal slowing	Symmetric	Parieto-occipital
5*	5.00	Female	ALL	> 95th percentile	12.00	Seizures	Focal slowing	Symmetric	Parieto-occipital
6	8.00	Female	NHL	90-95th percentile	14.00	Seizures	Focal slowing	Symmetric	Parieto-occipital
7	9.00	Female	HUS	> 95th percentile	11.00	Seizures/ SE	PLEDs/ IRDA	Symmetric	Holohemispheric watershed pattern
8	1.00	Female	HUS	> 95th percentile	15.00	Seizures	Normal	Symmetric	superior frontal sulcus pattern
9	5.00	Male	HSCT	> 95th percentile	13.00	Seizures	Focal slowing	Symmetric	Parieto-occipital
10#	5.00	Male	ALL	<90th percentile	14.00	Seizures/ SE	Focal slowing	Asymmetric	Parieto-occipital
11	7.00	Male	NHL	90-95th percentile	14.00	Seizures	Focal slowing	Asymmetric	Parieto-occipital
12	4.00	Male	NB	90-95th percentile	14.00	Seizures	Diffuse slowing	Symmetric	Parieto-occipital
13	6.00	Female	ALL	<90th percentile	15.00	Seizures	Normal	Symmetric	Parieto-occipital
14	4.00	Male	HUS	> 95th percentile	12.00	Seizures/ SE	Focal slowing	Symmetric	Holohemispheric watershed pattern
15	6.00	Male	ALL	> 95th percentile	13.00	Seizures	Focal slowing	Asymmetric	Superior frontal sulcus pattern
16	5.00	Male	ALL	<90th percentile	14.00	Seizures	Focal slowing	Symmetric	Parieto-occipital
17	6.00	Male	NHL	<90th percentile	13.00	Seizures	Focal slowing	Symmetric	Parieto-occipital
18	6.00	Female	ALL	> 95th percentile	14.00	Seizures/ SE	Focal slowing	Symmetric	Parieto-occipital
19	5.00	Male	ALL	90-95th percentile	13.00	Seizures	Diffuse slowing	Symmetric	Central pattern
20	4.00	Male	NB	> 95th percentile	15.00	Seizures	Normal	Symmetric	Parieto-occipital
21	6.00	Male	HSCT	90-95th percentile	13.00	Seizures	Focal slowing	Symmetric	Holohemispheric watershed pattern
22	7.00	Female	HSCT	> 95th percentile	13.00	Seizures	Focal slowing	Symmetric	Holohemispheric watershed pattern
23	11.00	Female	Nephrotic syndrome	> 95th percentile	11.00	Seizures/ SE	Diffuse slowing	Symmetric	Parieto-occipital
24	8.00	Male	Nephrotic syndrome	> 95th percentile	12.00	Seizures	Diffuse slowing	Symmetric	Holohemispheric watershed pattern

GCS, Glasgow Coma Scale; ALL, Acute lymphoblastic leukemia; NB, Neuroblastoma; NHL, Non-Hodgkin lymphoma; HUS, Hemolytic uremic syndrome; HSCT, Hematopoietic stem cell transplantation; * A & B in Fig 2 are MRI brain for Patient number (5); # C & D in Fig 2 are MRI brain for Patient number (10)

Appendix 2: Laboratory findings of the studied patients

Laboratory findings	Median, IQR	Mean \pm SD	Range
Serum creatinine (mg/dL)	0.6,0.43-1	0.9 \pm 0.8	0.3-3.3
Blood urea (mg/dL)	20, 17-30	34.17 \pm 35.5	10-140
ALT (U/L)	37, 30-44	38.6 \pm 1.55	12-80
AST (U/L)	35.5, 30-40	39.5 \pm 1.58	20-83
Albumin (g/dL)	4.4, 3.6-5	4.1 \pm 0.9	2.1-5.5
Coagulation status:			
PT (seconds)	13, 12.5-13.75	13.2 \pm 1.27	12-17
PTT (seconds)	34, 29-38	33.2 \pm 5.25	24-43
Hemoglobin (g/dL)	9, 8.6-10	9.4 \pm 1.37	7-14
Leucocytic count (\times 1000 cells /mm ³)	3.45, 1.75-8	5.34 \pm 4.36	0.4-16
Platelets (\times 1000 / mm ³)	165, 82.5-257.5	170 \pm 108.29	25-370
C reactive protein (mg/dL)	12, 6-18	13.9 \pm 1.04	3.3-48
Serum electrolytes			
Serum sodium (mmol/L)	139, 138-140	139.2 \pm 3.5	130-150
Serum potassium (mmol/L)	4, 3.7-4.55	4.18 \pm 0.71	2.9-5.88
Serum calcium (mg/dL)	9, 9-9.5	9.08 \pm 0.65	7.6-10
Serum magnesium (mg/dL)	1.9, 1.8-1.9	1.8 \pm 0.28	1.18-2.6

IQR, interquartile range; SD, standard deviation; ALT, alanine transaminase; AST, aspartate transaminase; PT, Prothrombin time; PTT, Partial thromboplastin time

Appendix 3: Clinical, EEG and brain imaging Follow-up findings of the studied patients

	Clinical Recovery	IQ	Follow-Up MRI after 2 months	Follow-Up MRI 2 months after 2nd attack of PRES	Follow-Up MRI after 6-24 months	Epilepsy	EEG at follow-up
1	1 week	100	Complete resolution	-	Complete resolution	no	Normal
2	1 Week	95	Complete resolution	-	Complete resolution	no	Normal
3	1 Week	90	Complete resolution	-	Complete resolution	no	Normal
4	1 Week	90	Complete resolution	-	Complete resolution	no	Normal
5*	1 Week	90	Complete resolution	Partial resolution	Residual lesion	Epilepsy	Normal
6	1 Week	95	Complete resolution	-	Complete resolution	no	Normal
7	2 Weeks	105	Partial resolution	-	Complete resolution	no	Normal
8	1 Week	110	Complete resolution	-	Complete resolution	no	Normal
9	1 Week	92	Complete resolution	Partial resolution	Complete resolution	no	Normal
10#	2weeks	94	Complete resolution	Partial resolution	Residual lesion	Epilepsy	Epileptic activity
11	1 Week	95	Complete resolution	-	Complete resolution	no	Normal
12	1 Week	92	Complete resolution	-	Complete resolution	no	Normal
13	1 Week	90	Complete resolution	-	Complete resolution	no	Normal
14	1 Week	98	Complete resolution	-	Complete resolution	no	Normal
15	2weeks	93	Complete resolution	-	Complete resolution	no	Normal
16	1 week	95	Partial resolution	-	Residual lesion	no	Normal
17	1 week	90	Complete resolution	-	Complete resolution	no	Normal
18	1 week	92	Complete resolution	-	Complete resolution	no	Normal
19	2weeks	94	Complete resolution	-	Complete resolution	no	Normal
20	2weeks	82	Complete resolution	-	Complete resolution	no	Normal
21	1 week	94	Complete resolution	-	Complete resolution	no	Normal
22	1 week	93	Complete resolution	-	Complete resolution	no	Normal
23	1 week	95	Complete resolution	-	Complete resolution	no	Normal
24	1 week	94	Complete resolution	-	Complete resolution	no	Normal

IQ, Intelligence quotient; * A & B in Fig 2 are MRI brain for Patient number (5); # C & D in Fig 2 are MRI brain for Patient number (10)