

On-line Table 1: Clinical and imaging findings of all 21 patients in our series

No.	Age	Sex	CT	T1	T2/FLAIR	T1C+	Other	Max Di (cm)	Hemorrhage	Location	Clinical History
1	4 y	F	NCCT: hypoA surrounding blood	Uniformly hypointense	Uniformly hyperintense with rim enhancement	No enhancement	DWI: no diffusion restriction	3	Yes	4th ventricle	Seizure
2	13 y	F			Uniformly hyperintense	Uniform enhancement	DWI: no diffusion restriction	2.5	No	Right parietal cortex	Seizure
3	11 m	M	NCCT: hypoA	Uniformly hypointense	Uniformly hyperintense	Uniform enhancement	DWI: no diffusion restriction	5	No	Left medial temporal lobe	Seizure
4	5 y	M	NCCT: hyperA core, hypoA rim	Hypo-isointense	Hypointense core with hyperintense rim	Rim enhancement	MRA (avascular tumor)	2.5	No	Hypothalamus/optic chiasm/3rd ventricle	Sudden headache, visual changes
5	46 y	M	NCCT: hypoA	Uniformly hypointense	Uniformly hyperintense	No enhancement	MRS: elevated Cho/Cr; DWI: no diffusion restriction	2	Yes	Hypothalamus/optic chiasm	Headache and vomiting
6	2 y	M	NCCT: hypoA	Uniformly hypointense	Uniformly hyperintense	Uniform enhancement	MRS: elevated Cho/Cr; DWI: no diffusion restriction	4	No	Right posterior parietal cortex	Seizure
7	9 m	M		Uniformly hypointense	Uniformly hyperintense	Uniform enhancement	MRS: elevated Cho/Cr; DWI: no diffusion restriction	7	No	Hypothalamus/optic chiasm/3rd ventricle	Failure to thrive, cachexia, and vomiting
8	21 m	M	NCCT: hypoA	Uniformly hypointense	Uniformly hyperintense, thin rim of edema	Uniform enhancement	MRS: elevated Cho/Cr; spine TIC+: spinal metastases on follow-up imaging	3	No	Hypothalamus/optic chiasm/3rd ventricle	Failure to thrive, vomiting, and agitation
9	3 y	F			Heterogenous hyperintensity	Uniform enhancement		11	No	Bilateral temporal lobes	Clinically blind
10	20 m	M	NCCT: hypoA, fluid-fluid levels		Uniformly hyperintense	Heterogeneous with rim enhancement			No	Hypothalamus/optic chiasm/3rd ventricle/left temporal lobe	Right hemiplegia
11	24 y	M	NCCT: hypoA, fluid-fluid levels	Hypo-hyperintense with fluid-fluid levels	Hypo-hyperintense with fluid-fluid levels	Partial rim enhancement	GRE (hyper-intense tumor, hypointense hemorrhage) MRA (vascular tumor)	6	Yes	Right temporal lobe	Confusion, vomiting, headache, gait instability
12	9 y	M	NCCT: heterogenous hyperA	Hypo-hyperintense	Heterogeneous hyperintensity	Heterogeneous with rim enhancement	GRE: hyperintense tumor, hypointense hemorrhage; DWI: no diffusion restriction	6	Yes	Hypothalamus/optic chiasm/3rd ventricle/medial temporal lobes	Right hemiplegia
13	17 y	M	NCCT: hypoA CECT: rim enhancement	Uniformly hypointense	Heterogeneous hyperintensity	Rim enhancement	DWI: no diffusion restriction	4.5	No	Cerebellar vermis	Intractable headache
14	3 y	F	CECT: rim enhancement	Uniformly hypointense	Uniformly hyperintense	Heterogeneous with rim enhancement	DWI: no diffusion restriction; MRS: elevated Cho/Cr	5.5	No	Hypothalamus/optic chiasm	Left facial and extremity weakness
15	9 m	F	NCCT: hypoA, rim/central calcification CECT: rim enhancement	Uniformly hypointense	Uniformly hyperintense	Uniform enhancement	DWI: no diffusion restriction	4	No	Hypothalamus/optic chiasm	NF-1, macrocephaly
16	17 y	F		Uniformly hypointense	Uniformly hypointense	Rim enhancement	DWI: no diffusion restriction	4	No	Basal ganglia	Headache
17	13 y	F	NCCT: hypoA	Isointense	Uniformly hyperintense, thin rim of edema	Rim enhancement	DWI: no diffusion restriction	3.5	No	Cerebellum	Headache
18	9 y	F			Uniformly hyperintense	Uniform enhancement	DWI: no diffusion restriction; MRS: elevated Cho/Cr	2	No	3rd ventricle	Vomiting, ophtalmoplegia
19	9 y	F	NCCT: hypoA	Uniformly hypointense	Uniformly hyperintense	Heterogeneous with rim enhancement	DWI: no diffusion restriction; MRS: elevated Cho/Cr	3.5	No	Hypothalamus/optic chiasm	NF-1, headache, vomiting
20	21 y	M	NCCT: hypoA	Uniformly hypointense	Hypointense core, hyperintense rim enhancement	Heterogeneous with rim enhancement		2.5	Yes	Hypothalamus/optic chiasm	Headache
21	14 m	M			Uniformly hyperintense, small adjacent edema	Uniform enhancement		2.5	No	Thalamus	Right hemiplegia

Note—TIC+ indicates contrast-enhanced T1WI; Max Di, maximum diameter; hypoA, hypotenuating; hyperA, hyperattenuating; MRA, MR angiography; MRS, MR spectroscopy; DWI, diffusion-weighted imaging; Cho, choline; Cr, creatine; GRE, gradient recall echo; CECT, contrast-enhanced CT; NCCT, noncontrast-enhanced CT; NF-1, neurofibromatosis type 1.

On-line Table 2: Clinical and imaging findings of previously reported cases of PMA*

Age	Sex	T1C+	Hemorrhage	Location	Clinical History	Ref #
30 m	F	Enhancing, partially cystic	No	Hypothalamic/optic chiasm	Headache, vomiting, unsteady gait	32
3 yr	M	Uniform enhancement	No	Hypothalamic/optic chiasm	Diplopia, decreased left eye movement and vision	32
22 y	F	Anterior partial enhancement	No	Hypothalamic/optic chiasm	GOP0 with galactorrhea, elevated prolactin	32
2y	M	Uniform with thick peripheral enhancement	No	Hypothalamic/optic chiasm	Failure to thrive	5
5 m	M	Uniform enhancement	No	Hypothalamic/optic chiasm	Feeding difficulties	5
2 y	F	Uniform enhancement	No	Hypothalamic/optic chiasm	Failure to thrive	5
10 m	M	Uniform enhancement	No	Hypothalamic/optic chiasm	Developmental delay	5
16 m	F	Heterogeneous rim enhancement with cystic change	No	Hypothalamic/optic chiasm with leptomeningeal spinal metastases	Failure to thrive	33
6 y	M	Uniform enhancement	No	Spinal cord (thoracic, medulla)	Nocturnal back pain and constipation	14
8 y	M		No	Spinal cord (thoracic)	Back pain	14
1 m	M		No	Spinal cord (diffuse)	Failure to thrive, hypotonia	14
10 m	M	Heterogeneous enhancement	No	Hypothalamic/optic chiasm	Nausea/vomiting, eye twitching	30
4 y	F	Heterogeneous rim enhancement	No	Hypothalamic/optic chiasm	Decreased visual acuity, left proptosis/ptosis	30
9 y	F	Thick rim enhancement	No	Hypothalamic/optic chiasm	Headache, vomiting, weight loss	9
28 y	M	Enhancing nodule with surrounding hypointensity	No	Amygdala	Seizures	13
33 y	M	Uniform enhancement	Yes	Right ventricular horn, cervical leptomeningeal metastases	Headache, nausea, diplopia, disorientation	35
11 m	M	Heterogeneous enhancement	No	Hypothalamus/optic chiasm	Failure to thrive	36
4 m	M	Heterogeneous, rim enhancement	No	Hypothalamus/optic chiasm with extension into both hemispheres and ventricles	Feeding difficulties, vomiting, irritability	37
6 m	M	Heterogeneous, thick rim enhancement with mild central enhancement	No	Hypothalamus/optic chiasm	Failure to thrive	16
7 m	F	Uniform enhancement	No	Hypothalamus/optic chiasm	Failure to thrive, dysconjugate gaze, and nystagmus	16
8 m	F	Thick rim enhancement	Yes	Thalamus	Hemiparesis, facial asymmetry	16
3 m	M	No enhancement	No	Basal ganglia, extending into L frontal lobe and lateral ventricle	Bulging fontanelle, irritability	16
6 m	F	Uniform enhancement	No	Hypothalamic/optic chiasm, with extension into right basal ganglia	Failure to thrive, abnormal eye movements	15
29 y	F	Uniform enhancement	No	Spinal cord	Progressive neck and back pain	6
5 y	M	Rim enhancement	Yes	Hypothalamus/optic chiasm	Sudden headache and vomiting	38

Note:—T1C+ indicates contrast-enhanced T1WI; GOP0, Gravida0 Para0.

* Cases are chronologically ordered from top to bottom, oldest to most recent. Previously reported PMAs with no associated published imaging findings were excluded from this table.