ON-LINE APPENDIX: REFERENCES OF LITERATURE REVIEW

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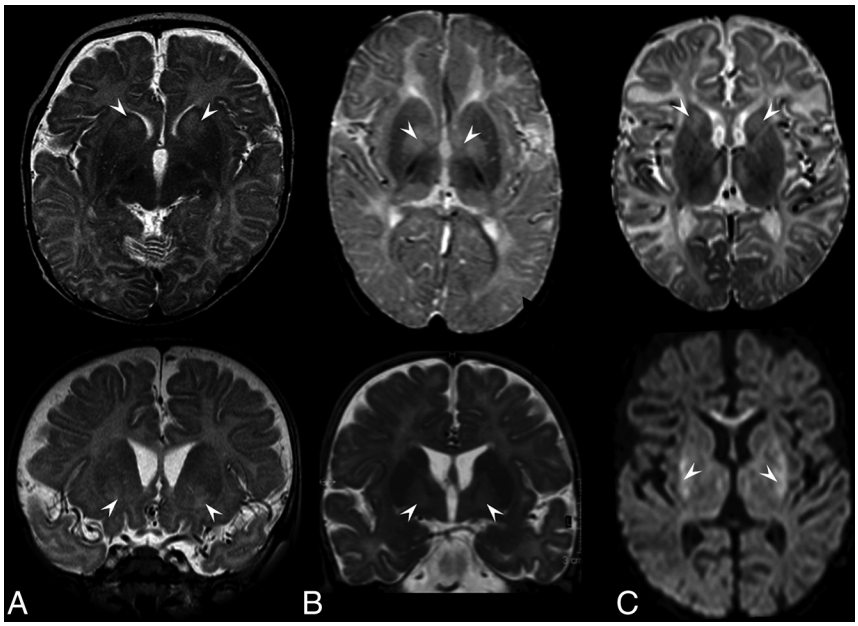
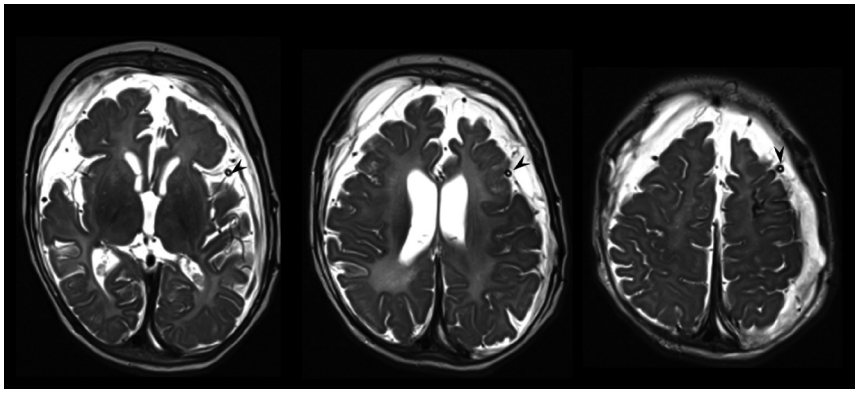
On-line Table: Demographics and main clinical data of our children with MD and children in the literature with MD who underwent brain MRI

Demographics	Present Sample	Literature Review (On-line Appendix)
Sample size	26 Children	62 Children
Sex	25 M; 1 F	57 M; 5 F
Age at clinical onset (mean) (range) (mo)	3.7 ± 2.5 (1–8)[a]	4.5 ± 3.3 (0.1–14)[b]
Age at first MRI (mean) (range) (mo)	7.5 ± 5.9 (0.3–32.2)	7.1 ± 5.6 (0.6–34.0)
Follow-up MRI	8/26 Children	23/62 Children
Age at last follow-up (mean) (range) (mo)	25.3 ± 19.4 (3.6–86.7)	10.2 ± 6.28 (1.5–30)
Follow-up duration (mean) (range) (mo)	22.8 ± 23.1 (1.4–78.5)	6.1 ± 5.9 (0.3–26)
Epilepsy	23/26	37/62
Age at epilepsy onset (mean) (range) (mo)	6.5 ± 3.4 (2.2–15.0)	4.6 ± 3.3 (0.1–14)[c]

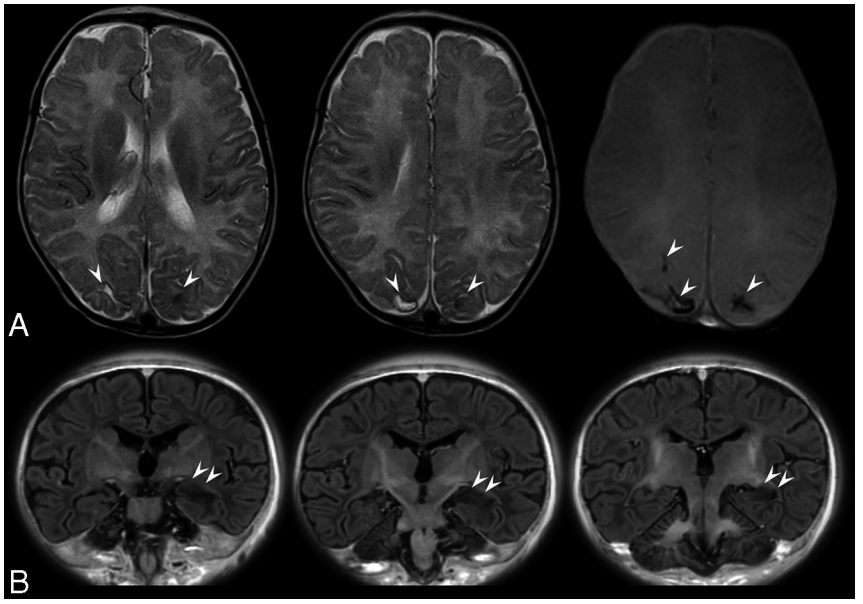
[a] Calculated from 25/26 MD children.
[b] Calculated from 31/62 MD children.
[c] Calculated from 19/37 MD children with epilepsy.



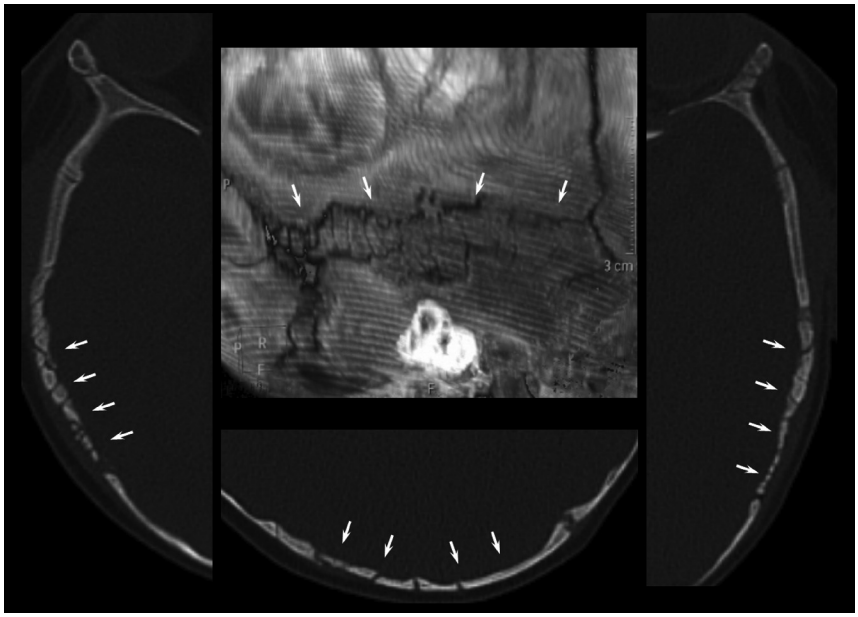
ON-LINE FIG 1. *A*, Axial and coronal T2-weighted images at the level of the basal ganglia showing asymmetric and inhomogeneous hyperintensity of the anterior neostriatum (*arrowheads*). Note the tortuosity of intracranial arteries and the mild supratentorial atrophy in a 5-month-old boy (patient 10) (normocephaly). *B*, Axial and coronal T2-weighted images at the level of the basal ganglia show bilateral symmetric hyperintensity of the globus pallidus (*arrowheads*) in a 4-month-old boy (patient 26). *C*, Axial T2- and diffusion-weighted images in a 14-month-old boy (patient 15) at the level of the basal ganglia show signal abnormality of the caudate head and medial thalamus bilaterally; the putamina appear slightly hyperintense on DWI (*arrowheads*). Note the hyperintensity of the genu of the corpus callosum in possible relationship with a recent status epilepticus.



ON-LINE FIG 2. Axial T2-weighted images in a 14-month-old boy (patient 14) showing bilateral subdural collections. Signal inhomogeneity and septa reveal different timing of the collections. Note brain atrophy (the child had microcephalia) and abnormal myelination that most likely are the combined result of delayed myelination and neurodegeneration. Cortical hemosiderin at the left superior frontal sulcus was due to a small iatrogenic blood clot (not shown) close to the intracranial end of a drainage (*arrowheads*).



ON-LINE FIG 3. *A*, Axial T2-weighted images in a 3-month-old boy showing bilateral small regions of occipital encephalomalacia characterized by linear hypointensity more evident on T2* imaging (image on the right), consistent with hemosiderin deposits (hemorrhagic encephalomalacia, *arrowheads*). *B*, Coronal inversion recovery images in a 5-month-old boy (patient 17) show signal abnormality and swelling of the left hippocampal formation (*arrowheads*). The examination was performed in concomitance with status epilepticus.



ON-LINE FIG 4. CT in a 4-month-old boy (patient 24) revealing numerous wormian bones (*small arrows*) that might simulate, on axial images, the presence of vault bone fractures. The central image is a magnified 3D reconstruction (volume-rendering technique) of the right pterion showing the wormian bones at the level of the sutures.