

On-line Table 1: List of MR imaging indications and findings

List of MR Imaging Examination Indications per Study Subject	List of MR Imaging Examination Findings per Study Subject
History of complicated birth with meconium aspiration	Structurally normal brain
Macrocephaly with questionable echogenicity of right caudothalamic groove	Structurally normal brain
Prematurity, dystonia, and tremors	Structurally normal brain
Developmental delay	Structurally normal brain
Dystonia	Structurally normal brain
Cyanosis	Structurally normal brain
Congenital nystagmus	Structurally normal brain
Hypoxemia and apnea of unclear etiology	Structurally normal brain
Developmental delay and dystonia	Structurally normal brain
Central apnea	Structurally normal brain
Developmental delay	Structurally normal brain
Prematurity and microcephaly	Structurally normal brain
Seizure	Structurally normal brain
Developmental delay and dystonia	Structurally normal brain
Seizures	Structurally normal brain
Developmental delay and macrocephaly	Structurally normal brain
Ataxia	Structurally normal brain
Prematurity, developmental delay, and possible seizure	Structurally normal brain
Autism and developmental delay	Structurally normal brain
Headache	Structurally normal brain
Acute aphasia	Structurally normal brain
Seizure	Structurally normal brain
Autism and developmental delay	Structurally normal brain
Seizure	Structurally normal brain
Headache	Structurally normal brain
Abnormal gait	Structurally normal brain
Seizure	Structurally normal brain
Seizure	Structurally normal brain
Abnormal tremor and tic	Structurally normal brain
Seizure, behavioral problems, and developmental delay	Structurally normal brain
Ataxia	Structurally normal brain
Autism and microcephaly	Structurally normal brain
Headache	Structurally normal brain
Headache	Structurally normal brain
Headache	Structurally normal brain
Seizure and developmental delay	Structurally normal brain
Headache	Structurally normal brain
Headache	Structurally normal brain
Developmental delay and microcephaly	Structurally normal brain
Headache	Structurally normal brain
Foot deformity and dystonia	Structurally normal brain
Dystonia	Structurally normal brain
Nasal dermoid	Structurally normal brain
Seizure	Structurally normal brain
Headache	Structurally normal brain
Seizure	Structurally normal brain
Dystonia and developmental delay	Structurally normal brain
Dystonia	Structurally normal brain
Dizziness	Structurally normal brain
Tinnitus	Structurally normal brain
Headache	Structurally normal brain
Headache	Structurally normal brain
Abnormal vision	Structurally normal brain
Autism	Structurally normal brain
Headache	Structurally normal brain
Seizure	Structurally normal brain
Rule out malformation	Structurally normal brain
Headache	Structurally normal brain
Concussion	Structurally normal brain
Abnormal balance and muscle tone	Structurally normal brain
Developmental delay, seizure, and abnormal balance	Structurally normal brain
Developmental delay	Structurally normal brain

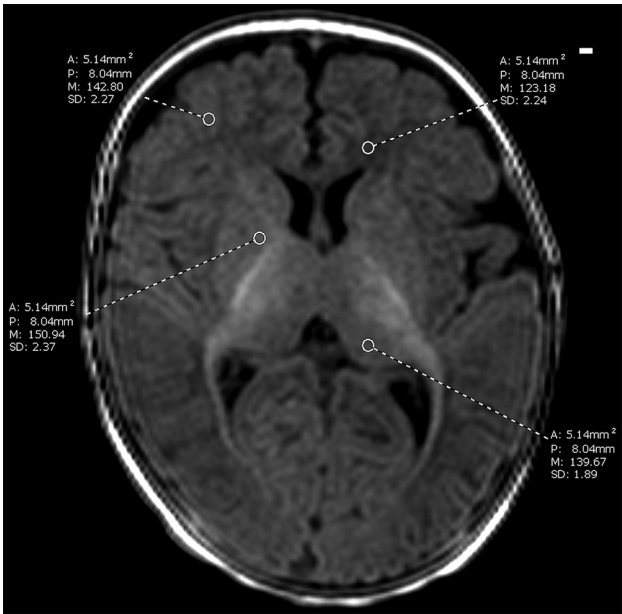
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On-line Table 1: Continued

List of MR Imaging Examination Indications per Study Subject	List of MR Imaging Examination Findings per Study Subject
Headache	Structurally normal brain
Headache	Structurally normal brain
Headache	Structurally normal brain
Seizure	Structurally normal brain
Headache	Structurally normal brain
Headache	Structurally normal brain
Headache	Structurally normal brain
Central apnea	Structurally normal brain
Seizure	Structurally normal brain
Headache	Structurally normal brain
Abnormal tremor	Structurally normal brain
Headache	Structurally normal brain
Concussion	Structurally normal brain
Dizziness	Structurally normal brain
Seizure	Structurally normal brain
Headache	Structurally normal brain
Headache	Structurally normal brain
Seizure	Structurally normal brain
Developmental delay	Structurally normal brain
Concussion	Structurally normal brain
Seizure	Structurally normal brain
Headache	Structurally normal brain
Headache	Structurally normal brain
Headache	Structurally normal brain
Seizure	Structurally normal brain
History of atrophy	Structurally normal brain
Macrocephaly and developmental delay	Structurally normal brain
Headache	Structurally normal brain
Headache	Structurally normal brain
Headache	Structurally normal brain
Headache, dizziness, and paresthesias	Structurally normal brain
Abnormal behavior	Structurally normal brain
Headache and seizure	Structurally normal brain
Headache	Structurally normal brain
Developmental delay	Structurally normal brain
Headache	Structurally normal brain
Abnormal movement and speech	Structurally normal brain
Headache	Structurally normal brain
Headache	Structurally normal brain
Headache	Structurally normal brain
Seizure	Structurally normal brain
Abnormal tremor	Structurally normal brain
Headache	Structurally normal brain
Headache	Structurally normal brain
Headache	Structurally normal brain
Headache	Structurally normal brain
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Headache	Structurally normal brain
Headache	Structurally normal brain
Headache	Structurally normal brain
Headache	Structurally normal brain
Headache	Structurally normal brain
Headache	Structurally normal brain

On-line Table 2: Age parameter estimates from linear spline models

ROI	Before 36 Months			After 36 Months			Difference		
	Estimate	95% CI	P Value	Estimate	95% CI	P Value	Estimate	95% CI	P Value
Globus pallidus	0.019	0.012–0.026	<.001	0.002	0.001–0.003	<.001	–0.017	–0.025 to –0.009	<.001
Thalamus	0.013	0.006–0.02	<.001	0.001	–0.0001–0.002	.08	–0.012	–0.02 to –0.005	.002
Dentate	0.011	0.004–0.019	.006	0.001	–0.0002–0.002	.11	–0.011	–0.0187 to –0.002	.01
Frontal GM	0.007	0.001–0.012	.02	0.0004	–0.0003–0.001	.26	–0.006	–0.012 to –0.0002	.04
Frontal WM	0.028	0.02–0.036	<.001	0.0005	–0.0005–0.001	.34	–0.028	–0.036 to –0.019	<.001



ON-LINE FIG 1. Representative ROI measurement, globus pallidus, thalamus, and frontal lobe cortex and subcortical white matter, infant.



ON-LINE FIG 2. Representative ROI measurement, dentate nucleus, infant.



ON-LINE FIG 3. Representative ROI measurement, pons, infant.



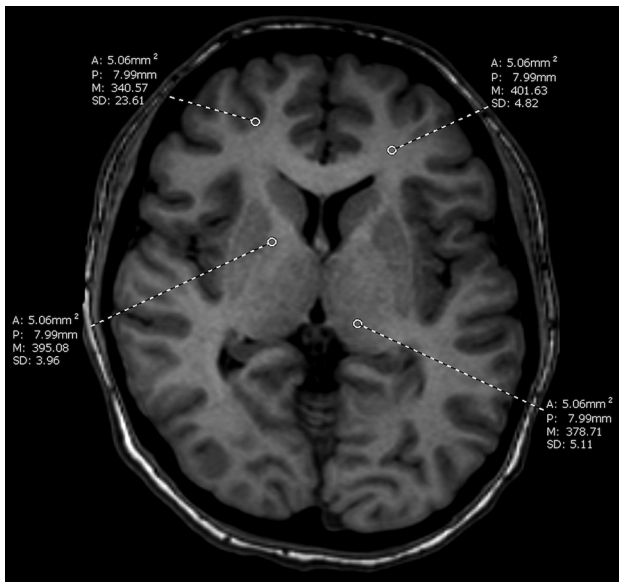
ON-LINE FIG 5. Representative ROI measurement, dentate nucleus, school age (10 years of age).



ON-LINE FIG 4. Representative ROI measurement, globus pallidus, thalamus, and frontal lobe cortex and subcortical white matter, school age (10 years of age).



ON-LINE FIG 6. Representative ROI measurement, pons, school age (10 years of age).



ON-LINE FIG 7. Representative ROI measurement, globus pallidus, thalamus, and frontal lobe cortex and subcortical white matter, older adolescent (17 years of age).



ON-LINE FIG 9. Representative ROI measurement, pons, older adolescent (17 years of age).



ON-LINE FIG 8. Representative ROI measurement, dentate nucleus, older adolescent (17 years of age).