

Supplementary Online Content

Li Y, Thompson WK, Reuter C, et al. Rates of incidental findings in brain magnetic resonance imaging in children. *JAMA Neurol*. Published online March 22, 2021. doi:10.1001/jamaneurol.2021.0306

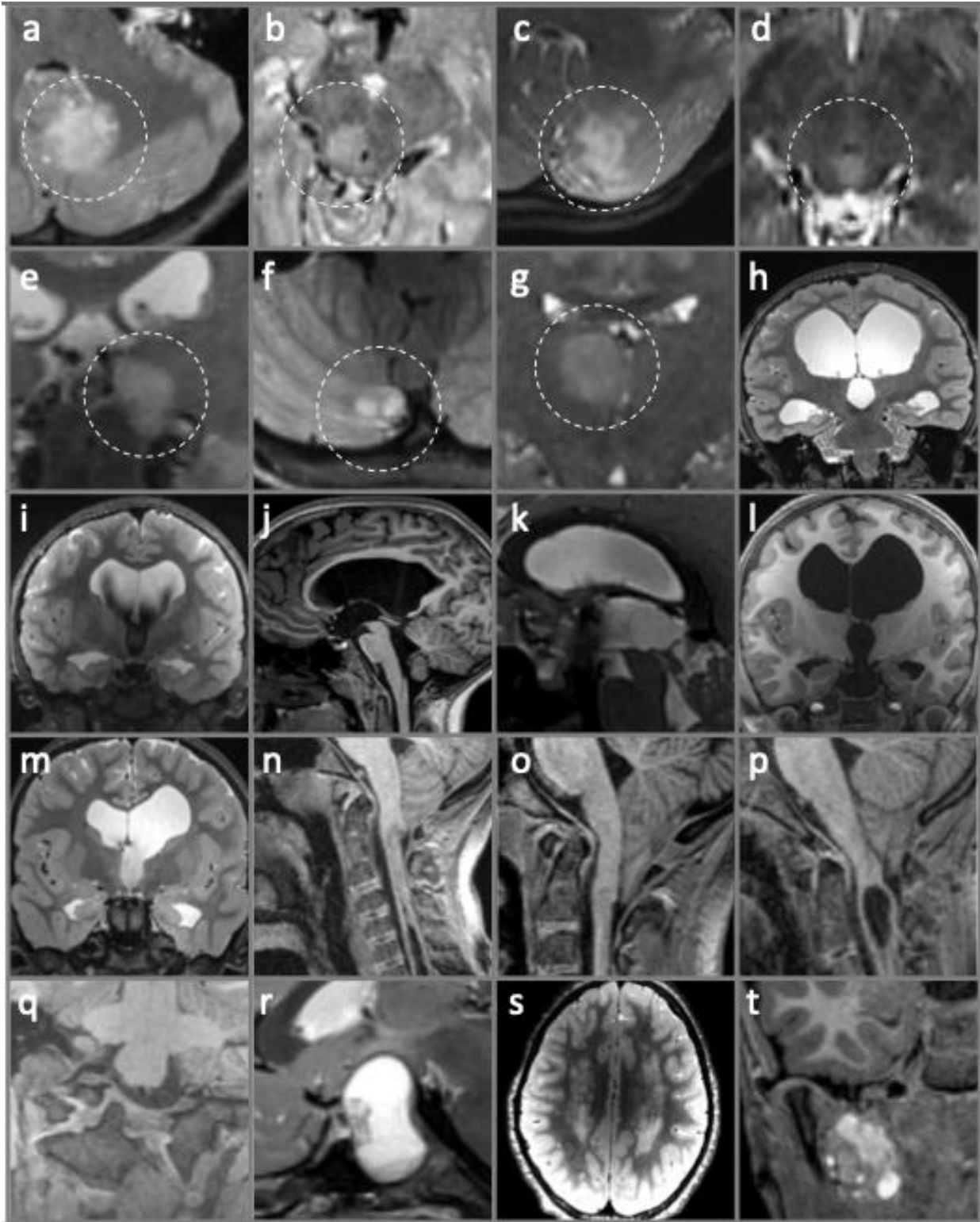
eFigure. Twenty Category 4 Studies

eTable 1. IFs by Zygoty

eTable 2. IRR Analyses Included Three Families of Two Siblings Each

This supplementary material has been provided by the authors to give readers additional information about their work.

eFigure: Twenty Category 4 studies included a-g) 7 mass-like regions of signal abnormality concerning for glial neoplasm, h-m) 6 cases of hydrocephalus, n-p) 3 cases of severe Chiari I malformation with cerebellar tonsillar descent 15-24 mm below the foramen magnum, two of which demonstrated associated syrinx, q) 1 case of offset of the lateral masses of C1 and C2, suggestive of instability at the craniocervical junction, r) 1 sellar/suprasellar mass likely representing an adamantinomatous craniopharyngioma, s) 1 case of diffuse supratentorial white matter signal abnormality concerning for a toxic/metabolic process, t) 1 large multi-cystic mass in the right masticator space.



eTable 1. IFs by zygosity, A) Overall rates of incidental findings do not differ by zygosity. B) Pearson's chi squared analysis examining frequency of twin pairs with concordant IF scores for Category 1 (normal) or Categories 2-4 (with IFs). There was no enrichment for concordant scores in the monozygotic compared to dizygotic twin pairs.

A)

	Dizygotic	Missing	Monozygotic	p-value
N	1042	263	708	0.076
IF category 2-4 (%)	226 (21.7%)	74 (28.1%)	157 (22.2%)	

B)

	Category 1	Category 2,3,4	p-value
Dizygotic	287	32	0.619
Monozygotic	219	29	

eTable 2. IRR analyses included three families of two siblings each. To control for any potential bias introduced by relatedness we repeated the recommendation-for-referral agreement analyses eight times, each time retaining one member of the three families.

Cohen's Kappa	Tetrachoric Correlation	Stuart Maxwell Test p-value
0.833	0.969	0.134
0.823	0.966	0.09
0.823	0.964	0.225
0.813	0.961	0.157
0.832	0.969	0.134
0.822	0.966	0.09
0.822	0.964	0.225
0.812	0.960	0.157
Range: 0.812-0.833	Range: 0.960-0.969	Range: 0.09-0.225