

On-line Table 1: Clinical data concerning the 22 patients included in the study

Patients	MRI		GA		History	D	AS	CA	E	S	SS	Day of Examination	Amiel-Tison Score	Outcome Group
	Date (day)	Sex	BW (g)	(weeks + days)										
1	6	F	3050	41+2	MSL	NI	1/5	No	No	Yes	3	8	Death day 19	B
2	5	F	3000	41+3	FHRA	NI	1/1	No	Yes	Yes	3	8	Death day 12	B
3	4	F	3730	40+2	FHRA, MSL	CS	3/10	No	No	Yes	2	17	Moderate abnormalities	A
4	3	F	3070	40	Head retention, NC	NI + IE	1/3	No	No	No	2	8	None or minor abnormalities	A
5	5	F	3040	40+5	FHRA, MSL	NI + IE	2/9	No	No	Yes, SE	3	12	Moderate abnormalities	A
6	2	F	4000	39	NC	NI	0/ND	Yes	Yes	No	3	10	None or minor abnormalities	A
7	4	M	2380	38	FHRA, IUGR	CS	6/7	No	No	Yes	2	17	Moderate abnormalities	A
8	3	M	3620	41	None	NI	2/8	Yes	No	Yes	1	13	None or minor abnormalities	A
9	4	M	3760	40	Dystocia + MSL	NI	1/3	No	No	Yes	3	7	Moderate abnormalities	A
10	4	M	3510	40	FHRA	CS	0/ND	No	Yes	Yes	3	13	Severe abnormalities	B
11	5	M	2800	39	FHRA	CS	5/8	No	No	No	1	9	Moderate abnormalities	A
12	6	F	3700	41	Major FHRA	NI	3/3	No	No	Gasps	3	4	Death day 6	B
13	5	M	3450	39+2	NC	NI	1/5	No	No	Yes	2	6	Moderate abnormalities	A
14	4	F	2575	37+4	None	NI	0/ND	Yes	Yes	No	3	6	None or minor abnormalities	A
15	3	F	2570	37	FHRA	CS	2/6	No	No	No	3	3	None or minor abnormalities	A
16	3	M	4480	40+4	None	CS	1/4	No	No	No	3	4	None or minor abnormalities	A
17	1	F	3100	40+2	FHRA	CS	0/0	Yes	Yes	No	3	ND	Death day 2	B
18	1	F	3000	38	NC, FHRA	CS	1/1	Yes	Yes	No	3	ND	Death day 2	B
19	1	M	3570	38+1	FHRA	NI	2/10	Yes	Yes	Yes	2	5	Moderate abnormalities	A
20	6	F	2560	41+3	FHRA	NI	5/7	Yes	Yes	No	2	5	None or minor abnormalities	A
21	3	M	3450	38+2	None	CS	1/2	No	No	Yes	3	6	None or minor abnormalities	A
22	1	F	2050	38	IUGR	CS	2/6	No	No	No	2	7	None or minor abnormalities	A

On-line Table 2: Codifications for MRI score

A	Brain swelling: 0, none; 2, yes
B	Grey/white matter differentiation: 0, present; 1, absent in one localization; 2, absent in more than one localization
C	High signal in the PLIC on T1WI: 0, Normal; 1, mild decrease; 2, absent
D	Hyperintensity on T1WI sequences on PP and T: 0, None; 1, one localization; 2, more than 1 localization
E	Hyperintensity on T2 sequences on PP and T: 0, None; 1, one localization; 2, more than one localization
F	Brain stem abnormalities on T1WI and/or T2WI sequences: 0, None; 1, yes
G	Cortex abnormalities on T1 and/or T2 sequences: 0, None; 1, one localization; 2, more than one localization
H	White matter petechial abnormalities: 0, None; 1, one localization; 2, more than one localization
I	Subarachnoid hemorrhages: 0, None; 1, yes
J	White-matter abnormalities in DWI: 0, None; 1, one localization; 2, more than one localization
K	Basal ganglia abnormalities in DWI: 0, None; 1, one localization; 2, more than one localization
L	Cerebral cortex abnormalities in DWI: 0, None; 1, one localization; 2, more than one localization

On-line Table 3: MRI score results for the 22 neonates

Case	A	B	C	D	E	F	G	H	I	J	K	L	Total	Outcome
1	2	2	2	1	0	1	2	0	0	2	0	0	12	B
2	0	0	1	0	0	0	1	0	0	0	2	0	4	B
3	0	0	1	0	0	0	0	0	0	0	0	0	1	A
4	0	0	1	0	2	0	0	0	0	0	0	0	3	A
5	0	1	0	0	0	0	1	0	0	2	1	2	7	A
6	0	0	1	0	1	0	0	0	0	0	0	0	2	A
7	0	0	1	0	0	0	0	0	0	0	0	0	1	A
8	0	0	1	0	0	0	1	0	1	0	0	1	4	A
9	0	0	1	0	2	1	0	0	1	2	0	0	7	A
10	2	0	2	0	2	1	2	0	1	2	2	2	16	B
11	0	0	0	1	1	1	0	2	0	2	0	0	7	A
12	2	2	2	0	2	1	2	0	1	2	2	2	18	B
13	0	0	1	0	0	1	0	1	0	1	0	0	4	A
14	0	0	2	2	0	0	0	2	1	2	0	0	9	A
15	0	0	2	2	0	0	0	0	0	2	0	0	6	A
16	0	0	0	0	0	0	0	0	1	0	0	0	1	A
17	0	0	2	0	0	0	0	0	0	2	2	0	6	B
18	0	1	0	0	2	0	1	0	0	2	2	0	8	B
19	0	1	1	1	0	0	1	0	1	2	0	1	8	A
20	0	0	1	1	0	0	0	0	0	2	0	0	4	A
21	0	0	0	2	2	1	0	0	0	2	2	0	9	A
22	0	0	1	0	0	0	0	0	0	2	0	0	3	A

Note:—The abnormalities listed in table 2 are summed in table 3 for each case to generate a score (total).

On-line Table 4: Diffusion tensor imaging results in the 22 patients (ADC: $\times 10^{-3}$ mm/s²)

Patients	PLIC						PP						CP					
	Right		Left		Mean		Right		Left		Mean		Right		Left		Mean	
	FA	ADC	FA	ADC	FA	ADC	FA	ADC	FA	ADC	FA	ADC	FA	ADC	FA	ADC	FA	ADC
1 ^a	0.282	0.673	0.21	0.715	0.246	0.694	0.139	0.729	0.113	0.713	0.126	0.721	0.211	2.219	0.265	1.495	0.238	1.857
2 ^a	0.378	0.774	0.356	0.745	0.367	0.76	0.127	0.797	0.123	0.785	0.125	0.791	0.334	1.445	0.24	1.521	0.287	1.483
3	0.399	1.137	0.442	1.098	0.421	1.117	0.12	1.139	0.127	1.155	0.123	1.147	0.333	1.802	0.39	1.502	0.361	1.652
4	0.466	1.096	0.413	1.061	0.44	1.078	0.175	1.143	0.133	1.13	0.154	1.136	0.387	1.465	0.327	1.421	0.357	1.443
5	0.331	1.069	0.446	1.003	0.389	1.036	0.145	1.107	0.144	1.056	0.144	1.082	0.366	1.457	0.374	1.074	0.37	1.265
6	0.449	1.19	0.371	1.131	0.41	1.161	0.151	1.286	0.156	1.279	0.153	1.282	0.383	1.666	0.355	1.319	0.369	1.493
7	0.443	1.152	0.418	1.121	0.43	1.136	0.123	1.203	0.127	1.195	0.125	1.199	0.382	1.931	0.386	1.313	0.384	1.622
8	0.468	1.163	0.496	1.099	0.483	1.131	0.191	1.153	0.199	1.132	0.195	1.142	0.413	1.257	0.392	2.028	0.402	1.643
9	0.447	1.058	0.509	1.035	0.478	1.047	0.151	1.142	0.157	1.11	0.154	1.126	0.427	1.264	0.444	1.08	0.436	1.172
10 ^a	0.406	0.734	0.459	0.697	0.433	0.716	0.131	0.875	0.181	0.838	0.156	0.856	0.305	1.711	0.32	1.505	0.312	1.608
11	0.422	1.142	0.488	1.124	0.455	1.133	0.167	1.285	0.188	1.254	0.178	1.270	0.405	1.365	0.469	1.141	0.437	1.253
12 ^a	0.424	0.6	0.45	0.538	0.437	0.569	0.211	0.594	0.195	0.561	0.203	0.577	0.307	0.644	0.293	0.718	0.3	0.681
13	0.549	1.08	0.528	1.071	0.539	1.076	0.152	1.167	0.171	1.153	0.162	1.160	0.417	1.517	0.376	1.389	0.396	1.453
14	0.472	1.154	0.467	1.135	0.47	1.144	0.137	1.264	0.146	1.277	0.141	1.270	0.384	1.59	0.358	1.788	0.371	1.59
15	0.483	1.133	0.463	1.104	0.474	1.119	0.151	1.264	0.15	1.282	0.150	1.273	0.35	1.159	0.366	1.2	0.358	1.18
16	0.508	1.098	0.433	1.067	0.471	1.082	0.141	1.218	0.152	1.163	0.146	1.190	0.44	1.374	0.446	1.346	0.443	1.36
17 ^a	0.436	0.568	0.341	0.555	0.389	0.562	0.156	0.544	0.181	0.541	0.169	0.542	0.327	0.895	0.385	1.067	0.356	0.981
18 ^a	0.421	0.712	0.401	0.74	0.411	0.726	0.125	0.9	0.132	0.896	0.128	0.899	0.392	1.308	0.315	1.531	0.353	1.42
19	0.574	1.055	0.478	1.089	0.527	1.072	0.183	1.191	0.155	1.179	0.169	1.185	0.399	1.028	0.408	1.51	0.403	1.269
20	0.44	1.066	0.448	1.076	0.445	1.071	0.149	1.158	0.144	1.141	0.147	1.149	0.339	1.177	0.361	1.595	0.35	1.386
21	0.426	1.143	0.378	1.067	0.402	1.105	0.139	1.147	0.19	1.127	0.165	1.137	0.333	1.216	0.304	1.54	0.319	1.378
22	0.498	0.882	0.527	0.854	0.513	0.868	0.146	0.981	0.15	0.99	0.148	0.986	0.356	0.997	0.404	1.155	0.38	1.076
Mean	0.442	0.985	0.433	0.96	0.438	0.973	0.150	1.059	0.155	1.043	0.153	1.051	0.363	1.386	0.363	1.375	0.363	1.376
SD	0.064	0.206	0.072	0.199	0.062	0.202	0.023	0.222	0.025	0.224	0.022	0.223	0.051	0.356	0.058	0.279	0.05	0.26

^a indicates patients in group B.