

On-line Table 1: Demographic data for subjects with mild TBI and summary of conventional clinical findings

Patient	Age (Years)	Sex	GCS	HISC*	Time Since TBI (months)	No. TMH	Conventional Clinical MR Imaging Findings
1	31	F	15	1	35	1	L temporal CHC; R frontal CHC; TMH in L thalamus
2	43	M	15	19	6	3	R+L frontal CHC; L temporal CHC
3	25	M	15	4	38	15	R inferior frontal CHC
4	37	M	15	1	10	0	Normal
5	60	M	15	6	56	0	Multiple NWMH; basal ganglia lacunar infarct
6	61	F	15	7	19	19	R+L frontal CHC; L temporal CHC; R parietal CHC; NWMH
7	40	M	15	8	18	0	R+L frontal CHC; R+L temporal CHC
8	17	M	15	2	6	0	Normal
9	16	F	15	3	6	0	Single NWMH
10	42	F	15	15	37	0	NWMH
11	40	M	14	6	13	0	R+L frontal CC; R+L temporal CC
12	45	M	15	3	51	0	NWMH
13	29	F	15	5	29	0	Normal
14	37	M	15	2	20	1	L frontal CHC; L temporal CHC; R frontal CHC
15	50	M	15	2	44	0	NWMH
16	20	M	15	3	1	4	R temporal CHC
17	32	M	15	NA	3	0	R temporal CHC; L temporal CC
18	35	F	15	3	12	0	Normal
19	26	M	15	2	10	0	Normal
20	44	M	15	3	40	0	NWMH
21	52	F	15	10	53	0	Normal
22	49	F	15	NA	35	0	Normal
23	32	F	15	NA	13	0	Normal
24	48	F	15	NA	13	0	Normal
25	50	M	15	NA	27	0	NWMH
26	43	M	15	4	3	0	NWMH
27	23	M	15	NA	65	0	Normal
28	39	F	13	8	12	3	L temporal CHC; L parietal CHC; L frontal chronic subdural hematoma
29	46	F	14	1	8	2	R temporal CC; NWMH
30	25	F	15	3	7	4	TMH
31	23	F	15		29	0	L frontal CHC
32	47	F	15	13	17	0	Normal
33	36	F	14	6	12	4	L temporal CHC, L parietal CHC
34	27	M	15	4	12	19	TMH

Note:—GCS indicates Glasgow Coma Scale; HISC, head injury symptom checklist; TMH, traumatic microhemorrhages, L, left; R, right; CHC, chronic hemorrhagic contusion; NA, not applicable; CC, chronic (nonhemorrhagic) contusion; NWMH, nonspecific white matter hyperintensities.

*The HISC score is the number of symptoms self-reported by the patient at time of testing. HISC data are unavailable for patients 17, 22–25, 27, and 31.

On-line Table 2: Locations of traumatic axonal injury lesions based on DTI in each subject with mild TBI*

Patient	ACR	UNC	Genu	Cing	ILF	SCR	pct	plic	CP	alic	mcp	scp	Fmaj	BCC	SLFt	dscp	Total
1				X	X	X			X				X	X			7
2		X	X	X					X	X			X				6
3	X	X	X			X	X										5
4	X	X	X	X								X					5
5	X	X				X			X								4
6	X	X	X									X					4
7		X				X			X								3
8		X				X				X							3
9	X		X	X													3
10	X		X										X				3
11		X	X	X													3
12							X								X		2
13	X						X										2
14	X					X											2
15					X										X		2
16	X											X					2
17	X			X													2
18							X										1
19									X								1
20	X												X				1
21	X																1
22		X															1
23												X					1
24	X																1
25		X															1
26													X				1
27						X											1
28		X															1
29								X									1
30																	0
31																	0
32																	0
33																	0
34																	0
Total	14	10	7	7	6	5	5	3	3	2	2	2	1	1	1	1	
Mean FA (controls)	0.53	0.57	0.81	0.70	0.64	0.47	0.53	0.71	0.75	0.63	0.71	0.73	0.72	0.74	0.58	0.50	
2.5-SD threshold FA	0.45	0.45	0.71	0.58	0.47	0.3	0.37	0.60	0.59	0.46	0.54	0.55	0.37	0.59	0.40	0.33	

Note:—ACR indicates anterior corona radiata; UNC, uncinate fasciculus; Genu, genu of the corpus callosum; Cing, cingulum bundle; ILF, inferior longitudinal fasciculus; SCR, superior corona radiata; pct, pontine crossing tract; plic, posterior limb of the internal capsule; CP, cerebral peduncle; alic, anterior limb of the internal capsule; mcp, middle cerebellar peduncle; scp, superior cerebellar peduncle; Fmaj, forceps major; BCC, body of the corpus callosum; SLF, superior longitudinal fasciculus at the level of the cingulum bundle; dscp, decussation of the scp; X, location of the lesion.

* The structure was noted as damaged if the FA was 2.5 SDs less than the average FA of 26 healthy control subjects in either hemisphere. The mean FA of these control subjects is listed in the second-to-last row. The FA below which a structure was considered to have a traumatic axonal injury lesion is listed in the final row. Patient numbers correspond to demographic information in Table 1. Columns are sorted such that the most commonly damaged structure is at the far left. Rows are sorted such that the patient with the most DTI lesions is at the top.

† The SLF at the level of the BCC, forceps minor, centrum semiovale, and splenium did not have FA loss of >2.5 SDs in any of the patients.