

On-line Table: Sample characteristics^a

Clinical Information	Controls (n = 26)	DM-MCI (n = 20)	DM-NC (n = 22)	F/ χ^2 /t Value ^b	P Value ^c
Sex (female/male)	17:9	12:8	15:7	0.316 ^d	.854 ^d
Age (yr)	59.88 ± 6.17	62.75 ± 5.93	59.05 ± 6.22	2.102 ^e	.130 ^e
Formal education (yr)	9.92 ± 3.35	11.00 ± 3.54	11.64 ± 3.32	1.570 ^e	.216 ^e
Hypertension ^f	3 (11.5)	6 (30)	5 (22.7)	2.448 ^d	.294 ^d
Hyperlipidemia ^g	2 (7.7)	3 (15)	5 (22.7)	2.150 ^d	.341 ^d
Body mass index (kg/m ²)	23.49 ± 2.04	23.83 ± 3.27	22.39 ± 2.51	1.257 ^e	.291 ^e
Age DM diagnosed (yr)	—	53.65 ± 7.86	53.82 ± 5.72	0.08	.936
Diabetes duration (yr)	—	9.02 ± 7.95	5.28 ± 4.52	1.894	.066
Family history ^h	—	5 (25)	8 (36.4)	0.633 ^d	.426 ^d
Insulin use	—	3 (15)	1 (4.5)	1.329 ^d	.249 ^d
Complication (peripheral nerve and vascular lesions; retinopathy)	—	4 (20)	1 (4.5)	2.386 ^d	.122 ^d
Glycosylated hemoglobin A1c (%)	5.39 ± 0.41	8.22 ± 1.60	6.98 ± 1.26	2.789	.008
Glycosylated hemoglobin A1c (mmol/mol)	35.63 ± 4.47	66.20 ± 17.53	52.68 ± 13.85	2.785	.008
Fasting glucose (mmol/L)	5.22 ± 0.65	9.94 ± 2.07	10.29 ± 3.35	0.406	.687
Postprandial glucose	—	14.34 ± 4.78	14.99 ± 4.61	0.451	.654
Montreal Cognitive Assessment	28.73 ± 1.08	25.2 ± 1.20	28.09 ± 0.68	9.727	<.01
Mini-Mental State Examination	28.19 ± 1.06	25.3 ± 2.05	28.55 ± 0.96	6.655	<.01
Auditory Verbal Learning Test	—	32.1 ± 6.1	42.6 ± 5.7	4.971	<.01
Activities of Daily Living (Barthel index)	100 ± 0	99.75 ± 1.19	99.41 ± 2.77	0.513	.611
Hachinski Ischemic Score	0.88 ± 0.71	2 ± 1.03	2.09 ± 1.06	0.281	.780

Note:—DM indicates diabetes mellitus.

^a Data are expressed as mean ± SD or percentages unless otherwise indicated.

^b F, χ^2 , and t are reported for ANOVA, the Pearson χ^2 test, and Student t test, respectively.

^c All P values, except where noted, were obtained using a 2-tailed Student t test between the DM-MCI and the DM-NC groups.

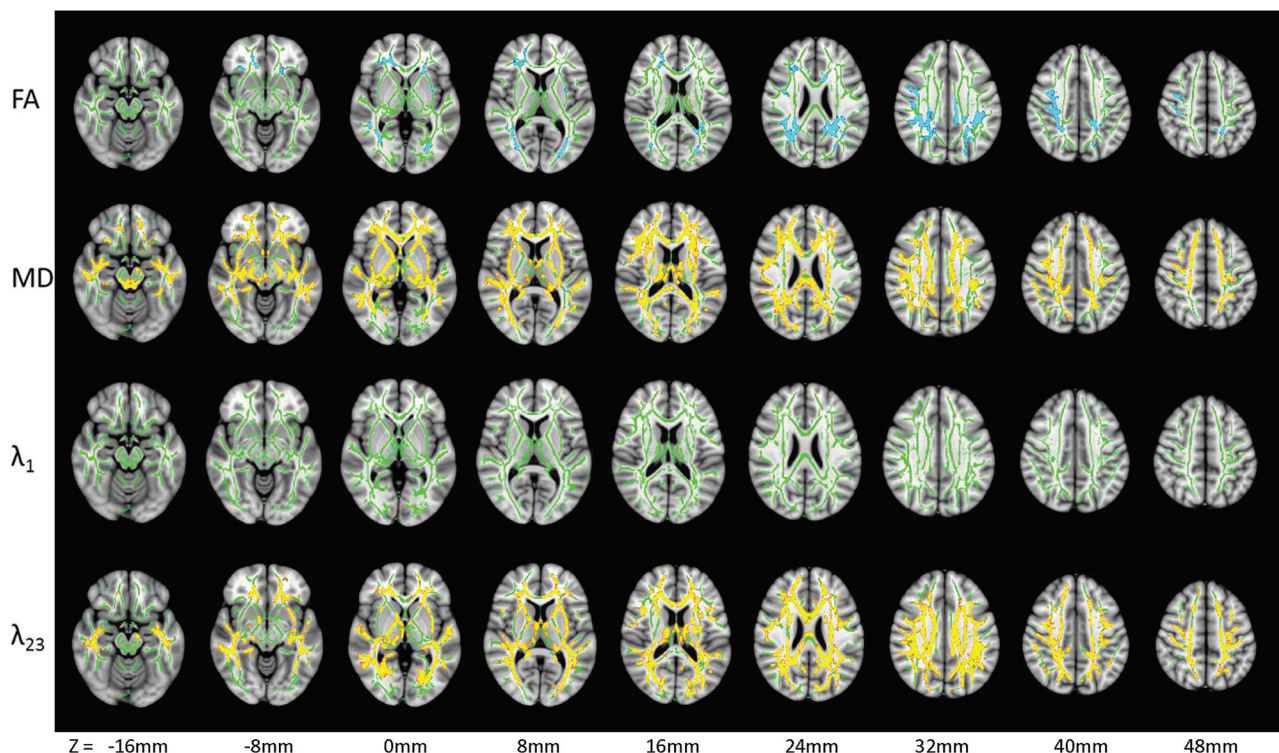
^d P values were obtained using the Pearson χ^2 test (2-sided).

^e P values were obtained using ANOVA.

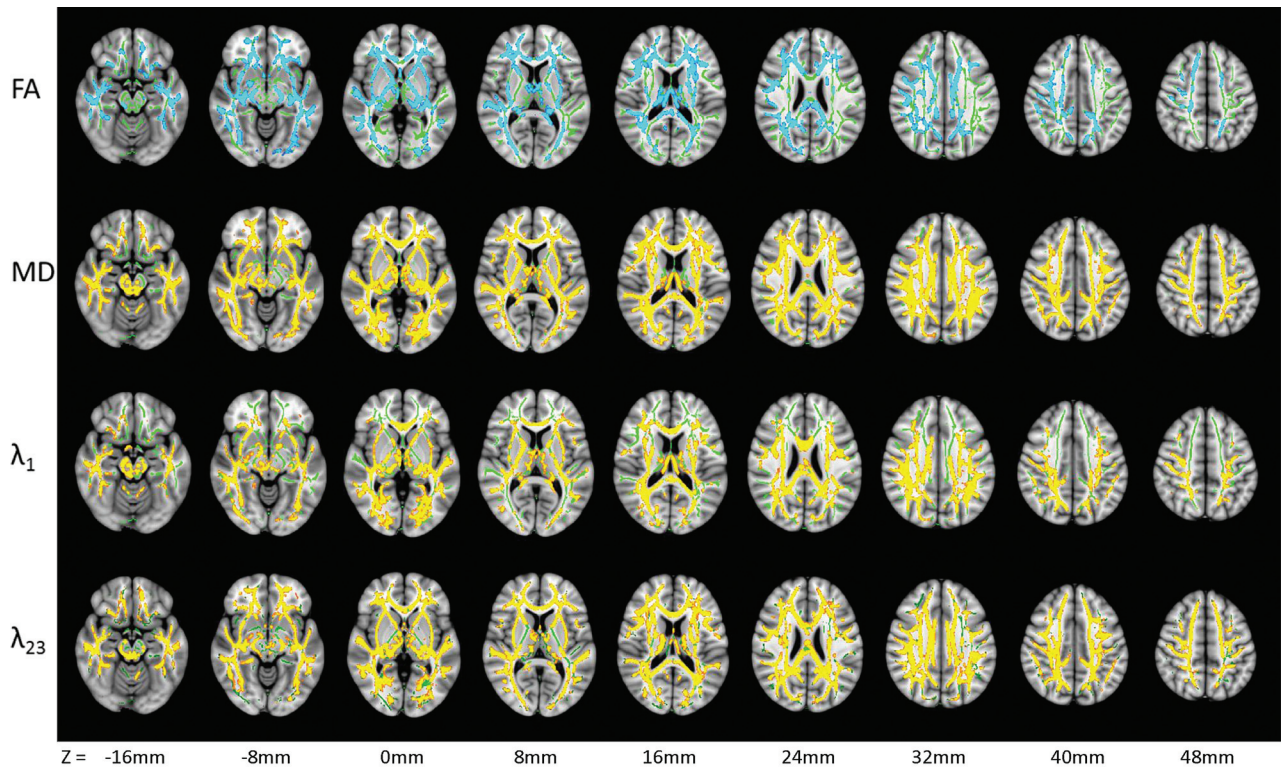
^f For hypertension, systolic pressure ranged between 140 and 159 mm Hg, or diastolic pressure ranged between 90 and 99 mm Hg. Patients with moderate and severe hypertension were excluded.

^g Hyperlipidemia was evaluated as a cholesterol level of >5.7 mmol/L or a triglyceride level of >1.7 mmol/L.

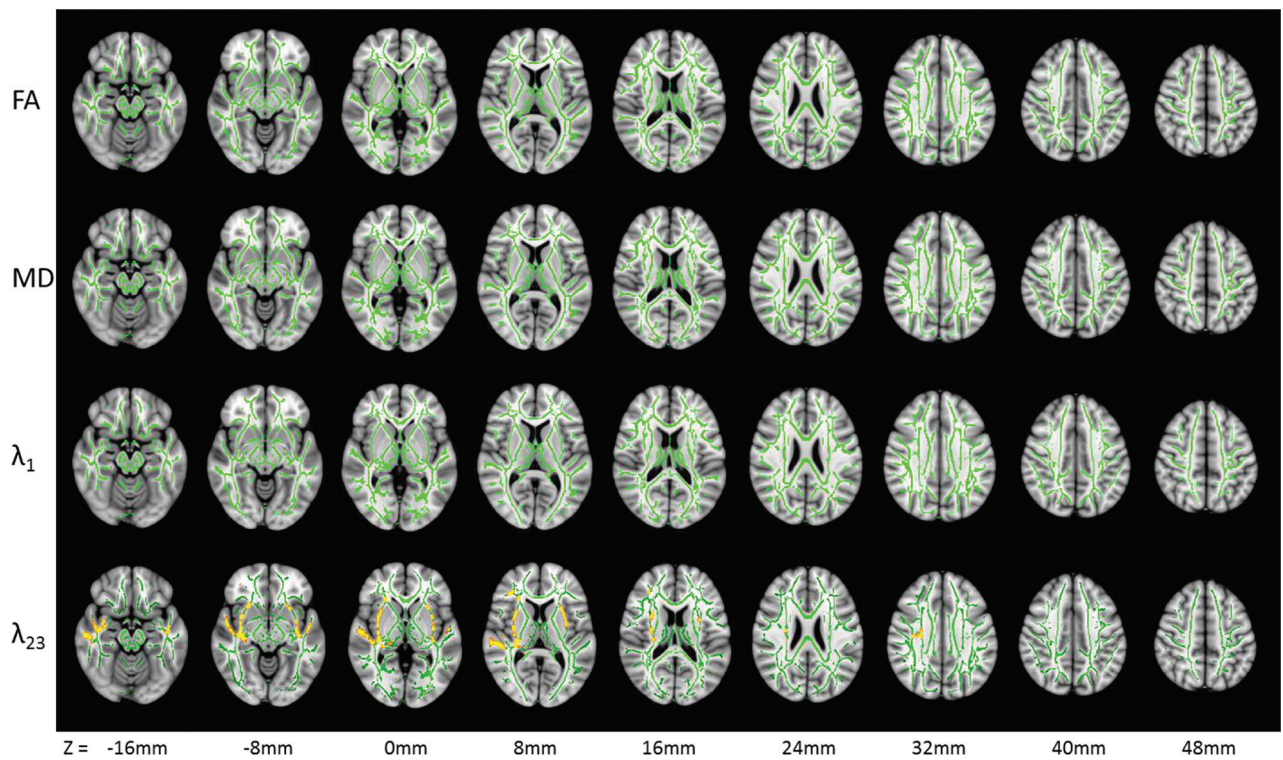
^h Family history accounts for immediate family members who had T2DM within 3 generations.



ON-LINE FIG 1. Differences in FA, MD, axial diffusivity (λ_1), and radial diffusivity (λ_{23}) between the DM-MCI and the DM-NC groups. All results were obtained from an FSL TBSS analysis. A Montreal Neurological Institute 152 T1 1-mm brain standard space was used as a background image (gray-scale). Green indicates the FA skeleton with a threshold of 0.2 highlighting the fibers used in the comparison; blue–light-blue (thickened for better visibility), regions with decreased FA, MD, λ_1 , or λ_{23} ; and red–yellow (thickened for better visibility), regions with increased FA, MD, λ_1 , or λ_{23} . Three selected sections from this figure are shown in Fig 2.



ON-LINE FIG 2. Group differences in FA, MD, axial diffusivity (λ_1), and radial diffusivity (λ_{23}) between the DM-MCI and the HC groups. All other details are the same as in the legend of On-line Fig 1. Three selected sections from this figure are shown in Fig 3.



ON-LINE FIG 3. Group differences in FA, MD, axial diffusivity (λ_1), and radial diffusivity (λ_{23}) between the DM-NC and the HC groups. All other details are the same as in the legend of On-line Fig 1. Three selected sections from this figure are shown in Fig 4.