

Figure S1. Trajectory chart analysis of the Morris water maze test. (A) Control group; (B) group A; (C) group B; (D) group C.

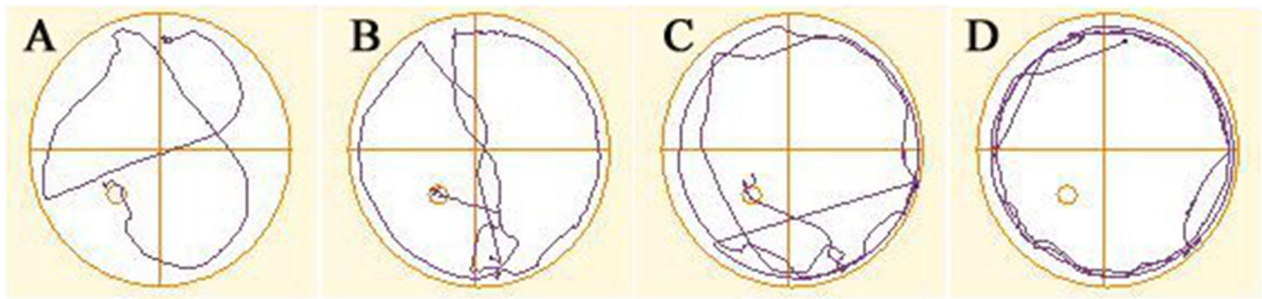


Figure S2. (A) Correlation analysis for FA and learning and memory deficits of the rats during the recovery stage. (B) Correlation analysis for β -APP and learning and memory deficits of the rats during the recovery stage. FA, fractional anisotropy; β -APP, β -amyloid precursor protein.

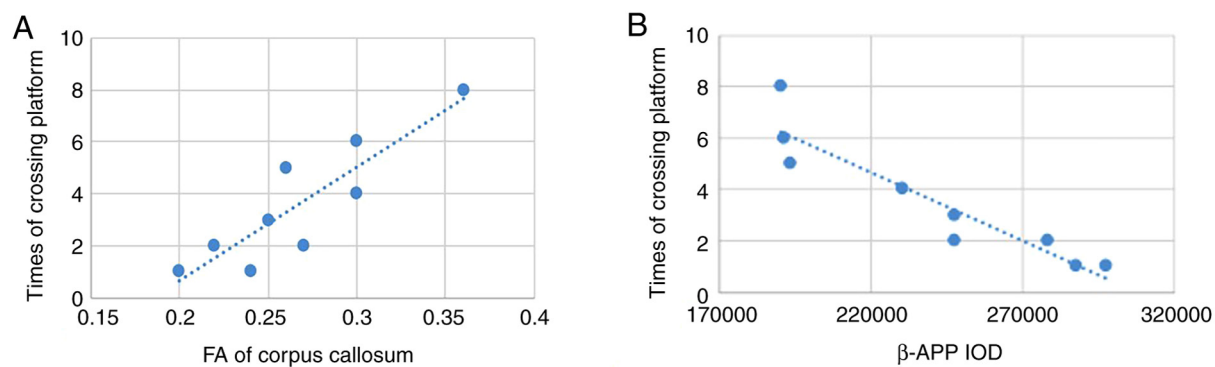


Table SI. Diffusion parameters of the region of interests of each group at different post-injury time points (n=10).

A, Corpus callosum				
Time	Controls	Group A	Group B	Group C
6 h				
FA	0.390±0.086	0.355±0.074	0.297±0.051 ^a	0.270±0.033 ^{a,b}
ADC	0.722±0.089	0.677±0.084	0.727±0.169	0.708±0.095
24 h				
FA	0.391±0.088	0.306±0.068 ^a	0.267±0.052 ^a	0.259±0.050 ^a
ADC	0.726±0.092	0.635±0.108	0.714±0.122	0.689±0.116
72 h				
FA	0.398±0.078	0.314±0.069 ^a	0.282±0.048 ^a	0.274±0.035 ^a
ADC	0.723±0.089	0.632±0.087 ^a	0.628±0.107 ^a	0.610±0.088 ^a
1 week				
FA	0.399±0.085	0.345±0.086	0.322±0.041 ^a	0.324±0.057 ^a
ADC	0.728±0.087	0.681±0.104	0.678±0.113	0.661±0.065
2 weeks				
FA	0.397±0.081	0.380±0.088	0.331±0.045 ^a	0.325±0.046 ^a
ADC	0.729±0.088	0.721±0.124	0.687±0.120	0.688±0.057
B, Left internal capsule				
Time	Controls	Group A	Group B	Group C
6 h				
FA	0.278±0.053	0.252±0.037	0.277±0.069	0.252±0.044
ADC	0.824±0.070	0.814±0.063	0.760±0.087	0.823±0.108
24 h				
FA	0.279±0.053	0.244±0.029	0.264±0.056	0.256±0.034
ADC	0.822±0.072	0.806±0.061	0.770±0.090	0.828±0.074
72 h				
FA	0.286±0.047	0.248±0.036	0.268±0.046	0.244±0.015 ^a
ADC	0.827±0.064	0.769±0.144	0.816±0.065	0.791±0.076
1 week				
FA	0.284±0.068	0.266±0.085	0.286±0.043	0.259±0.030
ADC	0.820±0.061	0.838±0.150	0.829±0.136	0.791±0.062
2 weeks				
FA	0.286±0.043	0.294±0.073	0.285±0.041	0.254±0.050
ADC	0.828±0.073	0.847±0.131	0.837±0.082	0.814±0.083
C, Right internal capsule				
Time	Controls	Group A	Group B	Group C
6 h				
FA	0.290±0.053	0.294±0.020	0.301±0.073	0.276±0.039
ADC	0.838±0.091	0.839±0.073	0.812±0.123	0.852±0.102
24 h				
FA	0.291±0.055	0.253±0.035	0.258±0.052	0.262±0.036
ADC	0.836±0.085	0.833±0.070	0.872±0.150	0.800±0.078
72 h				
FA	0.289±0.049	0.275±0.042	0.289±0.038	0.266±0.026
ADC	0.840±0.084	0.791±0.148	0.889±0.099	0.824±0.067
1 week				
FA	0.300±0.049	0.277±0.043	0.290±0.049	0.265±0.039
ADC	0.844±0.087	0.842±0.187	0.872±0.125	0.828±0.097
2 weeks				
FA	0.295±0.042	0.316±0.040	0.291±0.063	0.282±0.034
ADC	0.840±0.085	0.833±0.133	0.839±0.045	0.843±0.096

Table SI. Continued.

D, Left external capsule				
Time	Controls	Group A	Group B	Group C
6 h				
FA	0.295±0.080	0.257±0.041	0.280±0.090	0.268±0.056
ADC	0.857±0.070	0.866±0.132	0.809±0.168	0.836±0.155
24 h				
FA	0.297±0.078	0.235±0.037 ^a	0.232±0.058 ^a	0.240±0.046
ADC	0.854±0.070	0.804±0.101	0.798±0.077	0.785±0.104
72 h				
FA	0.295±0.071	0.250±0.032	0.249±0.034	0.257±0.037
ADC	0.854±0.070	0.795±0.161	0.904±0.176	0.770±0.079 ^{a,c}
1 week				
FA	0.292±0.061	0.267±0.084	0.271±0.028	0.269±0.058
ADC	0.860±0.069	0.852±0.233	0.813±0.129	0.834±0.139
2 weeks				
FA	0.298±0.077	0.293±0.076	0.294±0.053	0.264±0.050
ADC	0.862±0.072	0.876±0.131	0.810±0.118	0.791±0.103
E, Right external capsule				
Time	Controls	Group A	Group B	Group C
6 h				
FA	0.309±0.047	0.280±0.039	0.314±0.108	0.255±0.036 ^a
ADC	0.904±0.107	0.871±0.150	0.851±0.157	0.872±0.080
24 h				
FA	0.308±0.047	0.235±0.032 ^a	0.253±0.043 ^a	0.258±0.028 ^a
ADC	0.905±0.102	0.869±0.140	0.900±0.072	0.870±0.129
72 h				
FA	0.310±0.056	0.266±0.034	0.277±0.034	0.244±0.024 ^a
ADC	0.904±0.118	0.824±0.126	0.933±0.125	0.924±0.055
1 week				
FA	0.306±0.047	0.279±0.075	0.287±0.045	0.255±0.062
ADC	0.911±0.108	0.844±0.144	0.894±0.092	0.913±0.150
2 weeks				
FA	0.305±0.046	0.311±0.060	0.278±0.036	0.276±0.040
ADC	0.902±0.102	0.900±0.174	0.836±0.069	0.869±0.062
F, Left pyramidal track				
Time	Controls	Group A	Group B	Group C
6 h				
FA	0.332±0.031	0.319±0.031	0.326±0.059	0.297±0.065
ADC	1.000±0.105	0.978±0.066	0.951±0.139	0.973±0.088
24 h				
FA	0.332±0.032	0.312±0.081	0.338±0.054	0.284±0.072
ADC	0.998±0.103	0.946±0.138	1.065±0.083	0.971±0.063
72 h				
FA	0.327±0.030	0.303±0.066	0.376±0.038 ^{a,b}	0.318±0.058
ADC	0.999±0.076	0.870±0.176 ^a	1.023±0.131 ^b	1.017±0.097 ^b
1 week				
FA	0.333±0.051	0.318±0.040	0.329±0.024	0.313±0.040
ADC	1.005±0.093	0.957±0.207	0.988±0.163	0.944±0.167
2 weeks				
FA	0.336±0.033	0.344±0.043	0.314±0.054	0.292±0.068
ADC	1.004±0.097	1.009±0.201	0.989±0.088	0.919±0.110

Table SI. Continued.

G, Right pyramidal track				
Time	Controls	Group A	Group B	Group C
6 h				
FA	0.326±0.035	0.308±0.032	0.348±0.056	0.270±0.052 ^{a,c}
ADC	1.034±0.066	0.984±0.071	0.939±0.113	0.979±0.105
24 h				
FA	0.327±0.040	0.290±0.072	0.312±0.059	0.303±0.078
ADC	1.030±0.061	0.961±0.088	1.065±0.080	1.001±0.061
72 h				
FA	0.325±0.031	0.297±0.055	0.361±0.030 ^{a,b}	0.310±0.047 ^c
ADC	1.034±0.062	0.895±0.165 ^a	1.022±0.091 ^b	1.051±0.082 ^b
1 week				
FA	0.331±0.041	0.319±0.041	0.319±0.017	0.288±0.047 ^a
ADC	1.035±0.068	0.963±0.209	1.127±0.190	0.995±0.131
2 weeks				
FA	0.330±0.041	0.345±0.031	0.310±0.073	0.297±0.048 ^b
ADC	1.026±0.062	0.999±0.210	1.032±0.151	0.929±0.109 ^{a,c}
Data are presented as mean ± standard deviation. ^a P<0.0 vs. the control group; ^b P<0.05 vs. group A; ^c P<0.05 vs. group B. FA, fractional anisotropy; ADC, apparent diffusion coefficient.				

Table SII. The incubation period (time in sec required to find the platform) of the rats of each group (n=6).

Group	Day 4	Day 5	Day 6	Day 7
Controls	20.00±5.13	12.52±3.81	12.12±5.54	7.24±2.78
Group A	23.64±3.64	14.94±6.51	12.38±4.30	9.77±3.23
Group B	32.42±3.79 ^{a,b}	24.84±4.61 ^{a,b}	23.23±5.26 ^{a,b}	17.53±4.94 ^{a,b}
Group C	46.78±9.42 ^{a-c}	33.7±9.08 ^{a-c}	32.78±11.23 ^{a-c}	26.45±6.40 ^{a-c}

Data are presented as mean ± standard deviation. ^aP<0.0 vs. the control group; ^bP<0.05 vs. group A; ^cP<0.05 vs. group B.

Table SIII. Times of crossing the safety platform and the percentage of searching time for the safety platform quadrant of the rats in each group (n=6).

Group	Times of crossing the safety platform	Percentage of searching time for the safety platform quadrant (%)
Controls	6.60±0.89	0.74±0.06
Group A	6.20±1.09	0.72±0.10
Group B	3.33±0.89 ^{a,b}	0.53±0.06 ^{a,b}
Group C	1.67±0.82 ^{a-c}	0.42±0.03 ^{a-c}

Data are presented as mean ± standard deviation. ^aP<0.0 vs. the control group; ^bP<0.05 vs. group A; ^cP<0.05 vs. group B.